

The New York Medical Times

VOL. XVII.

NEW YORK, JUNE, 1889.

No. 3.

ORIGINAL ARTICLES.

THE USE OF VAPOR IN THE CURE OF PHTHISIS.

BY ROLLIN B. GRAY, M. D., NEW YORK CITY
AND TARRYTOWN, N. Y.

IN DISCUSSING the subject of inhalation it is of first importance to make some distinctions sharply enough to keep them uppermost in the mind in a subsequent study.

It would seem unnecessary perhaps, but from observation I deem it best to call attention to the difference between nebulized spray, or the coarse particles of a fluid, the product of the first step in the process of a more perfected mechanical disintegration, and the light smoky vapor resulting from the complete fracturing or *pulverization* of the spray globules. Spray, when thrown into the larynx by the projectile force necessary for its applicable conveyance, is nervously rejected by the glottis. Vapor, gaseous, filmy in its appearance, so readily and thoroughly commingles with ordinary air that it is easily drawn (not forcibly projected) into the larynx, trachea and bronchia, and diffused through the residual air in the bronchioles and terminal cells.

Then, too, it is of prime practical importance to differentiate between the odor given off by substances made volatile in admixtures and by chemical combinations, necessarily accompanied as they are by uncertainty, and resulting, therefore, in unknown, leastwise unreliable products.

In the process of making medicated vapor at the present day (doubtless best illustrated in the perfected apparatus of Dr. George A. Evans, of Brooklyn, N. Y.), the chosen medicament is thrown by means of quite highly compressed air through an atomizer into a sphere or a chamber, whence, after the spray globules have been sufficiently broken up, the consequent vapor is allowed to pass off in a smokelike volume and to commingle with the air in the room, or through a tube and mouthpiece, to be inhaled directly into the respiratory organs of the patient.

In this process *mechanical* subdivision is effected, and the patient receives just the medication intended by the physician, and also just the amount and potency desired. Condensation of the medicated vapor takes place so slowly that the most remote tubes and air-cells of the lungs are readily reached and *topically* treated.

Doubtless, by the exaggerated praise of the

treatment by inhalation at periods when the methods devised were so very imperfect, much odium has been unjustly cast upon a valuable adjunct to the medical armamentarium of the physician. The same has been the experience of the medical world in the past, with the majority, if not all, of our most valued remedies and remedial procedures, imperfectly understood, improperly manipulated and applied, and impatiently and immaturely discarded. Inhalants have been prescribed since the time of Hippocrates; and Galen advised residing near Vesuvius to the "phthysical" that they might breathe the sulphurated vapor as it rose. Spray baths and inhalation rooms have long since been in use at many watering places on the European continent, utilizing the nebulized water of their respective spas, for instance, the "Brine-baths" at Kreutznach and Reichenhall, as advised by Sales-Giron; but these spray baths are all imperfectly broken up fluid, and in most instances doubtlessly have been introduced from their novelty, to advertise the watering places or spas at which they are used. In other words, to repeat in a concise form, all efforts toward inhalent medication have, until quite recently, in fruition resulted in imperfect mechanical sprays or uncertain chemical gases.

In a brochure written in 1886, "*Medicated Air and Vapor in Consumption*," I first directed the notice of the medical profession to the subject of medicated apartments. I would now call attention to a quotation from that pamphlet: "In sanatoria, hospitals and invalids' retreats, this means of modifying and medicating the air in apartments occupied by invalids, must soon become as much a part of skillful hygiene as attention to heat, light and ventilation. It fact, it is, as before stated, part of the writer's conception, that vapor being now so readily and perfectly made, medicated air baths are the desideratum, fully as much as attention to the skin by heat and steam baths.

"By this means the air of pine-woods, of ozonic mountains and the sea-shore can be brought into our very houses, and invalids will not need hereafter to leave the kindly associations and conveniences of home, to enjoy a congenial climate and the soothing, healing atmosphere of far off sections."

The quotation does not refer to the specific antiseptic or bacillicidal medication requisite to the destruction of Koch's *bacillus tuberculosis*, nor to the annihilation of the septically poisonous products of putrefactive disintegration.

It is at the present time believed, by a not inconsiderable portion of medical observers, that the phenomenon of phthisis is in a large degree due to the reabsorption of the putrescent matter thrown off in the pathological process of tissue destruction in the lungs; or, in other words, that the daily rise of temperature and subsequent sweat is of septic origin, and that the gradual physical decline is not only the result of the imperfect oxygenation of the blood, but is due in a great measure to the contamination of that life fluid by the absorption of the putrescent matter before mentioned.

It is not necessary for our purpose to go into the study of the causes, predisposing or immediate, nor to analyze the different progressive steps of phthisis, catarrhal or tubercular. In the cases we are usually called upon to treat with inhalant medication, we have a more or less fetid discharge from the bronchial tubes. This bronchorrhœa may be caused by hereditary taint, or induced by cold and privation; or, it may be the result of tubercular infiltration, or other inflammatory excitants, as in the cases of stone-cutters, coal-heavers, millers, etc. The condition presented is the same in any event (of course, aside from natural relative complications), and we have to deal with the mucous membranes of the bronchia varnished over with a tenacious, more or less putrescent muco-pus, which is liable to be absorbed into the system, setting up a train of symptoms the result of imperfect aëration of the blood, and of septic poisoning. To avoid confusion, or to prevent being perhaps misunderstood, I will repeat that in chronic phthisis, so-called, whether Chronic Tubercular Phthisis, characterized by the development of tuberculous nodules through the lungs, or Catarrhal Phthisis, or Chronic Broncho-Pneumonia, or *fibroid* Phthisis, or Chronic Interstitial Pneumonia, or any other of the various pathological conditions described by writers as chronic pulmonary destructive disease, whether purely local in its origin, or constitutional, with acquired or inherited predisposition or not, we have an exciting cause (tuberculous constrictive tissue or foreign particles,) followed sooner or later by bronchial inflammation and catarrh, and interstitial solidification and abscess, or in case of fibrous phthisis encapsulated nodules or bronchial dilations with their accompanying peri-bronchitis.

Supposing we had a diseased external surface resembling in any degree the pathological conditions of pulmonary phthisis, what would be our treatment? In surgical wards in our hospitals, in the light of Listerianism, what is pre-eminently the special desideratum? The destruction of bacteria is the first step in every surgical operation of the present day. If the operative procedure is of any magnitude, the room is prepared days beforehand; cleansed and carefully saturated with antiseptics; the instruments, sutures, sponges, linen, and the clothing and hair, whiskers, and even the

breath of the surgeons and nurses are subjected rigidly to a wash and spray of baccillides and antiseptics to insure the prevention of the presence of specific bacilli or of the bacteria of putrefaction. In dressing ulcerative surfaces the lesion is carefully washed, and then dressed with an antiseptic and, perhaps, stimulating application; antiseptic gauzes being carefully bound over all, and every precaution taken to prevent what?—septic poisoning, the introduction of bacteria *termo* and, perchance, of specific bacilli. Now that these same potent agencies can be so perfectly applied to all the ramifications of the lung structure, what is more rational than the giving of such treatment our earnest attention? If the parasitic theory of the etiology of pulmonary phthisis, coupled, of course, with hereditary or acquired predisposition, be correct, and it has been generally accepted as such, it seems to me that nothing can be more rational to the thinking mind than the prompt adoption of an anti-parasitic local treatment; especially when no other specific theory of treatment is held out, and, too, when it is borne in mind that such treatment does not preclude the judicious use of supporting, calnative, moral or other measures. Koch claims that the *bacillus tuberculosis* is actually the cause or infectious agent in the transportation and propagation of tubercular disease; and the researches of Sormani and Bognatelli (see "*Ricerche Sperimentali sui Neutralizzanti del Baccillo Tubercularea scopo Profilattico*" and "*Ulteriori Ricerche sui Neutr. del Baccillo Tubercularea*," Milano, 1885); and other writers offer positive evidence of the ready destructibility of these bacilli by the use of such agents as phenic acid and corrosive sublimate. M. le Dr. Filleau (Jour. de Médecine de Paris), believes phthisis to be a parasitic disease, and one to be combated by anti-parasitic remedies; and of these, as the most potent against the bacillus and least injurious to the human system, he specially advises carbolic acid; though he proposes its use internally, not by inhalation. Schill and Fischer claim that "corrosive sublimate is powerless to disinfect the sputum, as a film or covering of albuminate of mercury forms around the mass and prevents disinfection." In so far as the influence of properly selected inhalants on suppurative lung cavities is concerned, we may quote Oertel in his "*Respiratory Therapeutics*." He says: "I consider the inhalations of carbolic acid, or the analogous salicylic and boric acids to be absolutely indispensable in the different stages of pulmonary phthisis, in chronic pneumonia, in the liquefaction of gaseous infiltration, also in copiously secreting cavities filled with decomposing products, in deep-spreading laryngeal ulcerations, to the ragged callous margins of which the decomposing bronchial and cavernous contents adhere, and undergo still further decomposition, exposed to the influence of atmospheric air.

Again, the widespread mycoses of the air passages and of the lungs, which I have repeatedly observed in the course of phthisis, are best combated by the phenol spray, and the vegetable parasites which proliferate over the whole respiratory tract, even to the pulmonary alveoli, are in a short time destroyed by it." Dr. Geo. A. Evans, of Brooklyn, to whom I have already referred, who has devoted much time and ardent study to the subject of inhalent therapeutics, a prudent writer as well as a close observer, in his "*Handbook of Historical and Geographical Phthisiology*" (D. Appleton, 1888), gives as a resultant showing of his antiseptic inhalent treatment, "that out of 154 cases, 55 recovered, 52 improved, 13 deteriorated and 34 died;" or, in other words, out of 154 cases treated, over 100 were benefited and of these 55 recovered; and it must be borne in mind that the treatment in these cases was not in any practical measure continuous, that is, that it was practised in treatments, in the doctor's rooms: and here arises the question of the importance as a factor in the successful use of inhalants in the treatment of diseases of the lungs and air passages, of the more or less *continued* subjection of these surfaces, as, for instance, when asleep, to the influence of antiseptic and tonic and stimulating air.

It is claimed that in one cubic metre, or about three feet square of ordinary atmospheric air there are not less than 1400 bacteria-termo or bacteria, the result of putrefactive change. Such being the fact, in a very short walk of our patient after an inhalent treatment, he will have his lungs again impregnated with promotive agencies of putrefaction, and the arrest of the destructive process terminated. In other words, the curative effort will be but transient,—not sufficiently encouraged and prolonged to allow Nature's restorative action to make any material headway. Physical vitality in its flight to restore a normal condition in the lungs says to us: "Keep off those infesting agencies of disease and destruction, and, with the aid of the stimulating, tonic, and otherwise supporting allies you will bring to my side in the contest, I shall successfully combat the intruder;" and in "night" treatment we can do this by a more or less continuous, persistent, disinfection of the lungs. Then, too, it must be recalled that in the tranquil moments of sleep there is a more perfect receptivity to medication, though this may seem to border on the subject of moral treatment. The patient is subjected, when unconsciously medicated, to no feeling of irksomeness; his malady is not at every breath brought before his mind with the depressing influence of such thoughts, and his morning awakening is accompanied with greater freedom of respiration; and increased strength brings with it encouragement, in strong contrast with the depressing sensations nearly always associated with the morning fits of coughing and

efforts to remove the products of inflammation, destruction and putrefaction which under other surroundings accumulate during the hours of sleep. Thus, during the period of repose and persistent sterilization of the diseased surfaces, we have a deprivation, as Koch has it, "of the qualities favorable to the existence and multiplication of the tuberculous bacillus, thus preventing its further growth."

It is worthy of attention, also, in this connection that medicaments like,—say, phenic acid, can be given in larger quantity in greater volume; in other words, a fifty per cent or even seventy-five per cent solution can be thrown continuously into the area of a medium-sized room, and in this diluted form inhaled harmlessly; whereas, as strong a use of the substance immediately through the mouthpiece of an Evans or other inhaler would coagulate, even destroy, the tissues. It must be observed then that we have in constant or "night" inhalent treatment three very important elements,—tranquil receptivity, requisite persistency, and increased potency of medicament; and it may be interesting to the profession to say, that the method employed is by simply compressing purified air by enginery, and conducting by means of block tin tubes this pressure to living and sleeping rooms, so as that in each apartment the required medicament can be distributed for the treatment or inhalation of the invalid: at each terminus of the tubing the requisite medicament can be supplied at the option of the medical attendant.

By this method ozonic, antiseptic or balsamic air can be presented to the diseased lung surfaces completely at the will of the prescriber; and at the same time it is readily to be perceived that such remedial applications rationally suggest the gymnastic use of medicated air under pressure, thereby mechanically expanding the contracted air vessels, and subjecting them not only to the curative antiseptic influence of the medicament, but increasing the area of the lung tissues for endosmotic action. It is to be hoped, and it is my firm belief, that in the immediate future this mode of treatment will receive the attention and approval it undoubtedly deserves.

Serpent Venom Antidote.—Reference has already been made to the notable series of experiments conducted by Dr. H. C. Yarrow, Curator of Reptiles in the National Museum, in his endeavor to discover an antidote for the venom of serpents; and the important results of these experiments have been announced. An antidote, Dr. Yarrow believes, has been found in the fluid extract *Jaborandi*, made from the South American plant *Pilocarpus pennatifolius*. Trials have apparently demonstrated the efficacy of this injection when administered to mammals; but it has not yet been shown to be of avail in the case of birds. This result of the National Museum series of experiments is of the utmost value to humanity, and *Forest and Stream* has published from Dr. Yarrow's pen the first authentic and complete report on the subject.

MERCURIUS DULCIS IN CARDIAC DROPSY, WITH SOME PERTINENT OBSERVATIONS, ETC., ETC.

BY E. M. HALE, M.D., CHICAGO, ILL.

THERE are several things to be learned in the following case, if the reader is not mentally blind, but there are physicians of both schools whose beliefs are so fossilized, that they are like the typical Bourbons, who "never learn anything and never forget anything."

Several months ago I was called to a distant part of this city, to see a case of advanced cardiac dropsy. The attending physician was an honest, painstaking practitioner, but wedded to the middle and high potencies, and Shussler's inane theories.

He had given all the symptomatically indicated remedies, but the patient was fast nearing the "dark Valley."

His history was as follows: He was a German, a lawyer, who for several years had mitral stenosis, with dilatation of the left ventricle, without sufficient compensation.

Winter coming on, a bronchial cough set in, and he was sent to Florida, to St. Augustine. The climate of the coast did not benefit him, for cold north-easters are common there.

The portal and hepatic circulation became sluggish, and a condition set in which the local physicians, with typical obtuseness, called "malaria," and saturated him with quinine, which of course made matters much worse, and finally they sent him home to die. He then put himself under the care of his former physicians until I was called in consultation. He now had general anasarca, the abdomen was enormously distended, and the pressure upward was so great as to cause terrible dyspnoea. Perhaps there was also pulmonary oedema and hydropericardium.

The lower extremities were filled almost to bursting. His cough was suffocating. He could not lie down a moment, nor move from a sitting position without a feeling of suffocation.

The jaundice was intense—bronze. No movements of the bowels except from enema, and then clay colored and hard. The urine did not exceed in quantity four ounces a day, and was thick, loaded with bile and highly albuminous. The pulse slow and feeble, irregular, intermitting and scarcely to be felt. The heart sounds feeble, and the mitral murmur heard over a large space. A more unpromising case I never saw, and I agreed with Dr. — that the man had but a few days to live unless the kidneys could be aroused to action.

Here was a case where all the primarily indicated remedies had been tried according to their similarity and failed to benefit. I therefore suggested that a new departure be taken, and

that medicines be selected from a physiological basis of empirical data.

Having seen good results from merc. dulcis in cardiac dropsy, I suggested that it be given in doses of ten grains of the first decimal trituration, every two hours. The regular school has had excellent results from larger doses.

Now this may be looked upon as empirical, but I think it could be proven that the drug is capable of causing all the conditions above-mentioned by its secondary action. But it does not matter. It was a desperate case and needed heroic medication. The physician agreed to give it as directed, but I could see that he considered it as savoring of Old School therapeutics, and very heretical.

However, after taking the medicine twenty-four hours, the bowels began to empty themselves, first of the collected masses of clay-colored material, then of a thin yellow and greenish liquid. Then the kidneys began to act and the amount of urine rapidly increased, so that in a few days it reached the enormous (but necessary) amount of over a gallon in each twenty-four hours.

When I next saw the patient—about a week after my first visit—I was astonished and gratified by his appearance. The anasarca had nearly disappeared. He could lie down and sleep. The jaundice had faded. His appetite and digestion was good.

The mercurius was suspended, and I suggested that the condition of the heart be attended to. My prescription was, one tablet of euonymin one-tenth grain each, attended with one tablet of combined digitalis one-fifth grain and strychnia one-one-hundredth grain, each every four hours.

I heard nothing more of the patient for several weeks, when he came to my office to pay his bill. I did not know him. He appeared in pretty fair health, the mitral murmur was there, and probably always will be, but the digitalis and strychnia had contracted the thin heart and compensation was progressing.

He was very grateful, and flattered me by saying that he believed I had saved his life. I said, "What does Dr. — think about it?" "Oh!" he answered, "he thinks so too, but he says you are not a strict homœopath—that you give too much medicine and that you mix your medicines." This is the kind of liberality that I often meet in some members of our school, but such members are every year growing less in number.

But this illiberality did not end here. A certain teacher of materia medica, whose practice affiliated with Dr. —, and who had been first consulted in the case and saw my prescription, had the execrable taste to allude to me in a lecture to the students of — College as a "mongrel whom he could not call a homœopath." He considered me a heretic because I often used mixed medicines, appreciable doses and unproven drugs. Yet this same physician is on record as giving a

certificate recommending that "wonderful panacea," *Moxie's Nerve Food*!

This leads me to remark that the teachings of materia medica in most of our homœopathic colleges is sterile and a sham. It does not come up to the requirements of nineteenth century advancement in the science and art of medicine. They read off a list of so-called "key-note symptoms" and play with "cards of characteristics," leaving the students to go out utterly ignorant of the essential nature of the drug, its toxic or physiological action, its physical qualities, and its uses in regular practice. In a few years all these students, by study of these drugs from other sources, begin to find out something of their general uses. Not one in one hundred practice as they are taught in our colleges. The few who do so travel in a narrow rut, "learning nothing and forgetting nothing."

I do not hesitate to assert that such a method of teaching materia medica and therapeutics is a travesty and an insult to the intelligence of a student of the present decade.

If the teachers suppose that the graduates of these colleges will practice according to such teachings they are sadly mistaken. Some of these may for a year or two, but when they come into conflict with educated physicians of other schools, they are compelled to enlarge the scope of their practice and adopt the latest discoveries in therapeutics or go to the wall. They soon find that the "matching" of the patient's symptoms with those of drugs is a wearisome and thankless task. The cause lies in this: that not one-tenth of the symptoms in the pathogenesis of any drug is reliable. Then suppose they match the symptoms of the drug with the disease, the pathological indications for the drug must match those of the malady. If this really occurs then they make brilliant cures. But how often does all this happen?

They soon find that there are mechanical therapeutic methods which must be adopted. When the intestines are like a clogged sewer, festering with ferments and a manufactory of ptomaines, the bowels must be unloaded and that the third or the thirtieth of a drug ever so homœopathic will not do it.

The law of *similia* is the chief, if not the only, therapeutic law, when no mechanical or chemical impediment bars the way. It is wider and broader even than the ultra-Hahnemannian's claim, for it includes the dual action of drugs. But medicines often cure by virtue of their physiological and chemical effects. There is not the slightest doubt of this, and those who dispute it are as blind as those who disputed the movements of the earth. It is a fact that nearly every intelligent and practical physician soon marks out for himself a method of therapeutics, which differs widely from that which he was taught in college, or from that of any other physicians.

The records of our pharmacies tell singular tales. Lately out of curiosity I inquired of many pharmacies, located in this and other cities, how many of their customers ordered only the middle and high attenuations. The answer was, "not one in a hundred!" I then asked them to give me a list of the double remedies in use. I was surprised. The following list is not a full one, but is very suggestive:

Arsenic with iron—carbo-veg. with nux.

Arsenic with strychnia.

Arsenic with quinine—carbo-veg. with pepsin.

Arsenic with china—merc. with ipecac.

Digitalis with iron—merc. with iod. pot.

Digitalis with strychnia—*strophanthus with digitalis*.

Sulphur with nux.—merc. with morphine.

Nux. with podophyllin—nux. with bismuth.

Ipecac with codeine—codeine with ipecac.

Ipecac with conium—morphine with ipecac.

Santonin with calomel—morphine with atropia.

Merc. iod. with kali iod.—digitalis with glonoin.

At the last meeting of the American Institute, our pharmacies had on exhibition all and more of these compounds. Only one member was shocked, and he, the editor of *The Retrograde*, has not yet recovered. To these were added several triple remedies and a great number of miscellaneous compounds of cod-liver oil, bark and iron, hypophosphites and phosphates, sugar-coated pills, etc., etc.

"Why do you keep these heretical drugs?" I asked. They answered, "because they were ordered." "Who ordered them?" "The graduates of homœopathic colleges," was the answer. They declared that not a single, double or triple drug originated in the pharmacies. What a comment on the teachings of the teachers of materia medica and therapeutics.

If any one will examine the advertising pages of our journals, from the most liberal to the most illiberal, he will find "food for thought." An unsophisticated homœopath would naturally suppose that these advertising pages would be occupied only with advertisements of pure homœopathic preparations, in which only *one* ingredient had place. On the contrary, we find the same advertisements there which we find in so-called allopathic journals. I have often thought that the bodies of Hahnemann, Boeninghausen and others of the old worthies would turn in their graves could they read these advertisements!

I have examined the advertisements in all our journals, even those in the *Visitor* and *Advance*, those ultra-Hahnemannian exponents. Their advertising pages are hardly less "pure" than the "heretical TIMES."

I find advertisements from all the noted drug manufactories, price lists of pills of the most powerful and complicated ingredients, officinal compound "elixirs" and "cordials," etc. etc. Be-

sides, the list of proprietary medicines is appalling. Their Smith's, Jones's and Brown's compound elixirs of quinine, bark, iron, phosphates, hydrophosphates, bromo- and phospho-caffeines, tablets of bismuth, nux., ipecac and pepsin, etc., the various coca tonics, lithiates of potash and hydrangea, all the powerful mineral waters, compounds with such outlandish names as Caulocorea Viburnum compounds, Disvibumin (this in the immaculate *Visitor*), Listerine and Palpebrin of mysterious ingredients, Antifibrin and all the anti-pyretics, the ridiculous compounds of beef, iron, bismuth, etc., bromidia, papine, svapnia and other abominable anodyne mixtures *ad nauseam*.

Now why do manufacturers advertise these drugs and nostrums in homœopathic journals? Not for charity certainly. Not to pay the expenses of the journals, but for the reasons that it creates a demand for the drugs! Who buys these drugs? Who prescribes them? Homœopathic physicians! Why do they do this when the "similimum" the "single remedy" and the "minimum dose" will cure all the ills that flesh is heir to? The fact is they are like a bluff old western homœopath, who said in a meeting of the state society: "I do not propose to let my patients die for want of medicines. If the 200th of china don't cure them I give quinine in grain doses."

Our pharmacies, at least most of them, keep on hand as many of the above drugs as they can find room for. Said a prominent pharmacist to me, "I often have orders for ferrum phos. sixth, and iodide of iron pills one grain each, syrup of phosphate of iron, nux vom. thirtieth and granules of strychnia one-sixtieth grain, belladonna 200th and suppositories of ext. of belladonna one grain, and so on through the whole list. Physicians, if they have common sense, soon find out that the "minimum dose" means the dose that cures or relieves the patient: and that the "single remedy" is in nearly all cases an unattained ideal. They find out, too, that the supposed antidotal effects of our remedies is a baseless theory, which should be banished to the limbo of obsolete nations along with the imaginary "medicinal aggravations" of minute doses.

There are some other pertinent facts which show that there is a forward movement in the so-called homœopathic school. In 1850, when I purchased my first outfit of medicines, it was very difficult to procure anything but dilutions and triturations. The third was generally bought, and we run up our dilutions from that. Still earlier, only pellets of the attenuations were found at pharmacies, and I have seen pellets of the highest potencies which were imported from Germany. Now a very large majority of physicians purchase the mother tinctures.

Ten years ago the *pellet* began to lose its prestige. It never should have been used. It has

been the greatest stumbling block in the path of homœopathy, unless we except the high attenuations of medicines. My experiments with colored alcohol convinced me that the pellet rarely became saturated, generally the outside was merely coated with the dilutions; in fact the medicated pellet was not much better than the "infected." Then came the sugar tablet, which was some better, and afterwards the porous disc, or cone, which absorbs nearly two minims of fluid and gives us a definite basis for a calculation of dose.

The late introduction of the tablet triturate is the greatest advance made in our pharmacology. Not only are originally dry medicines used, but there are tablets of the tincture, ranging all the way from two minims of the mother tincture to the sixth dilution. Each tablet weighs two grains, and we know exactly how much medicine we are giving—whether one-tenth grain or the one-ten-thousandth of a grain.

The sugar coated granule, although originating in the regular school, is, and ought to be, adopted into ours. There are medicines that even in the third triturations are repulsive to the taste and smell, namely: zinc valerinate, asofetida, zinc phosphide, hepar sulphur, etc. These are now made so small that each one contains only one-hundredth of a grain.

All the improvements in our pharmaceutical methods tends to increase the spread and advance of homœopathy. When our pharmacological preparations have in them the elements of the tangible we disarm the criticism of scientific men. The day has gone by, when a belief in the dynamic influence of drugs can exist coincident with scientific knowledge. There has never been any trustworthy proof of such power.

The clinical records obtained by the administration of high potencies, or "provings" with them, can all be dismissed as unreliable. I once believed to the contrary, but a knowledge of the power of suggestion, and the spontaneous cures which so often occur, have led me to abandon such belief.

Now, in view of the facts above stated relating to the changes which have occurred in the actual practice of the great majority of the homœopathic school, have we not the right to ask whether or no the teaching of materia medica and therapeutics is a failure?

If it is true that nine-tenths of the graduates of the homœopathic colleges in the United States change or modify the methods which they have been taught, then the teaching has been a failure.

If it is true that graduates have to go to books not in our list of text-books, to get their knowledge of adjuvants, palliatives, laxative tonics, etc., then the teaching has been a failure.

The graduate ought not to go out from his alma mater half equipped for the practice of the healing art. If he does this, then his diploma is

an empty honor, and the money he paid for it has been obtained by false pretences.

I do not say that every teacher of materia medica and therapeutics in our colleges fails to teach the graduates how to practice medicine. There are some honorable exceptions, but I will not mention them, but I will say that none of them have the right to stigmatize nine-tenths of our school as "mongrel" because they do not practice as Hahnemann did fifty years ago.

YELLOW FEVER.

BY A. F. TRAFFORD, M.D., RED BANK, N. J.

THIS fearful pestilence which for nearly two centuries has, at intervals, devastated so many cities in Europe and America—mostly commercial centers—must continue an object of solicitude and of remedial study until more definitive success is obtained in dealing with it, or until some preventive is found. Until then the facts developed in its history will continue to be matter of public concern, as well as of scientific appreciation.

The most prevalent opinion attributes this scourge to an African origin. It first appeared at the south soon after the planters began to obtain laborers by means of the slave trade; and it has long been an accepted opinion among southern physicians that it was imported with the slaves from Africa. Whether so or not it has in its most terrible ravages spared blacks much more than whites who were less exposed. The recent increase of the disease among the blacks at Jacksonville may be imputed mainly to the departure of many whites from the city, and the extraordinary influx of blacks from outside.

Others have given the pestilence an Asiatic origin. In the West India Islands, where it raged fearfully about the middle of the seventeenth century, it was called the *Mal de Siam* (Siamese distemper), the vessel that brought it hailing from that country: but this must be much qualified by the fact that the vessel, before reaching the West Indies, had visited a port in Brazil then most actively engaged in the slave trade. The sufferers bled from the mouth, nose and stomach, and when the disease was at its height, as well in the West Indies as in our southern cities, some victims were attacked in the streets, dropping down dead, or dying soon afterwards. These were called *walking cases*.

As to the precise origin of this disease there is a difference of opinion among physicians the most studious and experienced in its treatment. It presents features so various and embarrassing, and so many facts susceptible of being plausibly urged in support of divers conflicting theories, that the profession has not yet arrived at a universally accepted conclusion.

Perhaps the latest and most prevalent theory not as yet ostentatiously accepted is, that in seasons of extreme heat in the vicinity of marshes, stagnant water, decaying animal or vegetable matter, and especially a crowded, dirty, intemperate population, certain infinitesimal and invisible animalcules called *microbes* are generated, and that they are charged with and spread the poison of yellow fever. It certainly seems probable that heat acting upon such elements as last mentioned will generate any poisonous thing capable of being generated; and whether such generation does take place or not, the proof is most ample that where such elements exist, they aggravate and make more fatal every existing disease and cause many more. Yellow fever, as an original disease, has never appeared in the absence of all such elements.

As favorable to the theory last referred to is cited the fact, that where the yellow fever has been most fatal, as at Rio Janeiro, Norfolk, New Orleans, all these bad elements existed.

Most other pestilences differ from yellow fever in this, that while the plague, cholera and some others have ravaged all countries and all climates, a certain high degree of heat is necessary to the development of yellow fever, and it dies out with frost. This seems to favor the *microbean* theory.

It is generally conceded that where the yellow fever infects the air, patients afflicted previously with other diseases may develop that disease.

The disease is atmospheric, and among its recognized generators are large earth excavations and exposure of mud, soil, and vegetable and animal matter to the heat of the sun. It is well-known that for some years past, extensive operations have been going on to drain the ever-glades and swamps of Florida. The suggestion is ventured whether this may not have had some effect in generating and spreading the yellow fever poison. If so, it may account for cases appearing and being conveyed from places outside of Jacksonville and without dangerous contact with the disease in that place.

S. M. Bemiss, M.D., in an article on yellow fever (published 1885, in the "System of Practical Medicine by American Authors," vol. I, p. 642), after citing *numerically* divers features and facts as to the disease says: "10th. These qualities of yellow fever infection, and especially its faculty of reproduction (which only *organisms* possess), furnish almost conclusive evidence that yellow fever is a germ disease produced by a specific *contagium vivum*."

Yet since all agree that whether generated by *microbes* or not, yellow fever does not exist in the absence of the bad elements before referred to as generating them, the truth or falsehood of the microbean theory seems mostly material, as a warning to the public, of the immeasurable mis-

chiefs that might ensue if the bad elements generating them were left without extirpation to breed them, and intensify and spread their deadly poison. The microbes, therefore, seem to come into injurious action to punish public negligence. As in all such cases of common public neglect, the guilty and innocent suffer together, though no one can be classed with the absolutely innocent, who makes no active individual effort for the public security. Public officers are mere agents, and their negligence does not excuse their principals, the people.

Not only does extreme cold destroy the contagion of yellow fever, but extreme artificial heat has the same effect. This, however, serves only to disinfect clothing and other *fomites*, and deprive them of the capacity of communicating the disease. This is still in accord with the *microbean* theory.

One explanation of the various conflicting theories as to the origin of the disease seems to flow from the fact, that many causes which do undoubtedly tend to develop it, have been too hastily assumed as its *primal cause*.

It has been remarked that without any explanatory cause, the disease attacks more rarely certain avocations; and of persons in the same house some will be attacked and others go unharmed. This is not in discord with the *microbean* theory, as mosquitoes, flies and other insects exhibit a similar peculiarity.

Among the mysterious idiosyncrasies of yellow fever, it may be mentioned that while it has at times fearfully ravaged the western coast of Africa, it has never appeared on the eastern coast. It has devastated the ports of Spain on the Atlantic, never touching the ports on the Levant (Eastern Mediterranean). There are, however, quite enough of other diseases at those ports.

It has another peculiarity in the self-deception of its victims who are animated and even cheerful and slow to believe that this deadly disease has attacked them. Professor Proctor, the solitary known victim at New York, persistently refused to believe that his disease was yellow fever.

Extreme dryness of the skin, causing moisture to flake or coagulate upon it, is a premonitory symptom. The celebrated traveler Humboldt, relates that on occasion of its prevalence at Vera Cruz, there was an Indian barber at Jalapa, on the route to Mexico, who was in the habit of informing those of his patrons whose skins showed this condition, that they were attacked with yellow fever and should promptly seek medical care.

This pestilence seems to show some approach to regularity in its visitations. In 1762, it prevailed at Philadelphia, and returned in about thirty years (1793). In 1791 it was in New York, in 1794 in Baltimore, and then and there it raged in the different cities, summer after summer, till 1804, then it disappeared till 1819, fifteen years

afterward. After 1824 it disappeared till 1854, thirty years afterwards. Its last appearance in New York is understood to have been in 1871. It has frequently, since 1854, at intervals usually long, re-appeared at New York, Philadelphia, and other parts of the North, and at Charleston, Savannah, Norfolk, Portsmouth, and most fatally New Orleans; but never with its first malignancy, and without that excess of fear and panic, which in many cases deprived the sufferers of hospitality or refuge, and caused physicians and nurses to flee and hospitals to be closed. The humane and rational change in these respects, and increased medical skill and care are rewarded by a vast diminution of the victims of this disease as compared with its early visitations. The proportion of those attacked who are cured is much larger. The fatal cases compared to the numbers attacked, appear to be not as much as one-fourth of what they were when the disease previously prevailed in this country.

ON RESTRICTION TO SCHOOL OF PRACTICE.

By W. Y. COWL, M.D., BERLIN.

IN SIMPLE addition to a letter, doubtless fresh in the minds of your readers, concerning the right of a physician to employ his own best skill in the treatment of his patients, to which you give an important position in the last issue of your valued journal, although coming from a gentleman, thereby designating himself as a layman, I beg to refer to Hahnemann's original discovery upon which homœopathy was founded, namely, that the cure of ague by Peruvian bark is homœopathic, or in other phraseology, the groups of symptoms, which quinine and other cinchona derivatives call forth in various individuals, are similar to those most frequently produced by malarial poisoning, notably periodical fever and sweat; for I hold a restriction of the use of this agent against physicians, who, as in general, become known to their patients as either allopathic or homœopathic, according to their avowal of belief in homœopathic treatment or not, for a measure of exclusion which would be essentially similar to those exercised by the dominant school of medicine toward Hahnemann and toward his followers on both sides of the Atlantic, up to the time when the New York State Medical Society voted down the ancient prejudice, and I take occasion to object to an abstraction from the idea, which a physician gets from his license or medical diploma, that he is entitled to practice medicine and surgery, when such a diminutory refinement of his powers be not accompanied by an explanation of the glittering generality of the law then standing.

It is only after observation, not merely of the treatment of disease by the members of the

faculty set to teach him, but, equally required for graduation, and more important and more impressive, of the examination and prescription for patients by his preceptor, that a physician is prepared in the first instance to do likewise for those who come into his care, and in the second, by consultation with his brethren in the profession as well as through his own experience and acumen, he comes into possession of further valuable means for the relief and cure of disease.

Any two physicians then will seldom, if ever, possess a like learning and experience, and no one indeed expects them to always take the same measures in their practice, whilst every one desires that his own doctor will use every odd bit of positive knowledge to his advantage, whether coming from the latest writer on homeopathy or from Hippocrates himself, and this however unknown or unproved by the neighboring physicians its beneficent action may be. Any one, for instance, would prefer an allopathic physician, who had had worthy experience in the homeopathic treatment of yellow fever to others, except the best homœopathists, for the treatment of this disease in a northern region; if again, later on, this same physician came to largely employ homeopathic means in his practice, and without stopping to consider the awful revulsion, from a literary point of view, became practically convinced that the principle—*similia similibus curentur*—was true, who would doubt his readiness to be called an homœopathist, so soon as he felt that his fellows would not exclusively draw away from him, if he did not deny the impeachment.

At this time he would undoubtedly say to one inquiring, that he treated his patients according to his knowledge and experience, sometimes homœopathically, sometimes allopathically, sometimes, perhaps, by both means, as well as by the limitless resources of a skillful and physiological hygiene for the case. Failing then a thoroughly competent homœopathic physician, the patient could make up his mind whether to trust the doctor, or if preferring to prescribe methods of treatment himself, be referred to some village medicus who practiced "either way." Now the occurrence of such an incident would undoubtedly make a deep impression upon a student-assistant, and determine him to watch and weigh all his master's methods and gradual change of method, that he might also see the superiority of a scientific empiricism over "pathological prescribing" for single symptoms, and although lacking the same past Old School experience as his preceptor, be ready to hold on to it in face of the fascination of the ever-changing methods of the rational mode of healing.*

But if at this juncture he were frightened with

the idea that a good part of what he had learned of the treatment of disease, namely, what he had gotten from the allopathic practice of his preceptor, must be given over because he believed in homeopathy, or was studying at an institution where homœopathic prescribing was taught and exemplified, he might look dismally at his slight command of the homœopathic materia medica and the loss of the old-time rough and ready modes of prescribing he had acquired, possibly seeing his way clearer or quicker to a business by the less arduous route of his medical ancestors than by that of his college teachers, and perhaps revert to the Old School. In this event, however, the experience and wisdom of his preceptor would stand him instead, and assure him that believe and practice by which method he may, no one would seriously interfere with him, so long as he shows that he does his best; for it is a recognized principle that in nature no sudden springs are made, and the movement of the profession, therefore, both collectively and individually, will not be expected to be abrupt. As Hahnemann himself took fifteen years in going from the practice of allopathy to that of homœopathy through a constant and very exclusive study and proof of the effects of drugs upon the healthy one at the present day unable to follow his example, may not look forward to a great improvement upon him: and, indeed, owing to the development of physical diagnosis and pathology since the beginning of this century, which have become alike necessary to all physicians for purposes of prognosis and hygienic management, the available time for the acquisition of therapeutical knowledge has become materially lessened. On the one hand, the *establishment of knowledge* with reference to the inner nature, causes and course of disease, which is the monument of the present century to the industry and opportunities of the Old School of medicine, that attracts the attention of all medical students, and necessitates a certain degree of devotion to it; and on the other, the active engagement of homœopathists in healing the sick,—notable to-day at the greatest centres of medical learning,—have alike conspired to hinder the commensurate development of the science of homœopathy, and have caused the student, lacking experience and dazzled by the beauty of modern investigations and the precision of modern medical phraseology, now difficultly conformable to the modes of expression at the time of the main building of the homœopathic materia medica by Hahnemann and his disciples, to feel less sure of his ground, or less able to defend it in wordy warfare.

After this manner altogether the fullness of the development of our knowledge of disease is a hindrance to the development of our knowledge of

* As established by Dunham ("Homœopathy the Science of Therapeutics: the Antagonism Between Allopathy and Homœopathy, and Other Essays." New York: 8vo., 1879, fourth pub.), the method of prescribing in allopathy is rational and symptomatic as, for instance, the use of

opium for pain or sleeplessness, or antipyrine or antifebrine for fever, whilst that of homœopathy is empiric and general, as, for instance, the use of white bryony in cases of pneumonia, or poison ivy in cases of erysipelas.

medicinal treatment, and with reference to many drugs it is to be freely admitted, that homœopathists have simply confirmed, albeit, irrefragably and ever since then continuously confirmed the original Hahnemannian provings of an hundred years ago: a mature confirmation which we place in its sharp natural contrast to the ever-changing fashions of Old School therapeutics, that depend at any one moment upon the current theories respecting the nature of the different diseases; theories which necessarily change with the advance of our knowledge of physiology and morbid anatomy, and which are chiefly valuable to us in reality, in that together with the facts upon which they are based, they give rise to an intelligent hygienic management of the different conditions affecting patients in the abnormal state of disease.

What degree of skill Hahnemann, von Bœninghausen, Jahn, Hering and Lippe were able to attain as devoted therapeutists, has been reached by few besides Dunham, of those who have given considerable attention to the explanation and naming of disease, as we may call pathology and diagnosis. From our present standpoint, indeed, we require but a slight knowledge of the pathology of Hahnemann's day to perceive why he cast it aside, and now that his discoveries in the realms, both of chemistry and therapeutics, are in everyday use, one can have no wonder at the indignation with which he attacked the speculations concerning disease, and the treatment founded upon them that were current then. Of such we find an apt instance in the note to the thirteenth and weightiest section of the *Organon*.*

"Man seke mur! Alle ersinnlichen Theoreme ueber die Funktionen und die innere Form und Bestandtheile des lebenden Gehirns in gesunden und kranken Zustände, alle jene unzähligen Speculationen ueber die Natur des Wassers und des Wärmestoffs vermochten nicht einmal, so lange die Welt stand, das specifische Heilmittel der vom Sonnenstich entstandnen Phrenitis weder zu errathen, noch auszusprechen! Lœffler fand es zufallweise in der Begiessung der Haut mit heissem Wasser, und die homœopathische Heilkunde weiss diese und andre specifische Huelfe aus ihren einfachen Sätzen leicht und schnell herborzurufen, ohne metaphysisches Kopfzerbrechen, auch ohne den oft Jahrtausende zögernde Zerfall abzuwarten."

If now to come to the minor point, whether a member of either school of medicine is at liberty to use the methods of the other without making his intentions known to the afflicted patient, or, assuming for the moment that "if a physician calls himself allopathic and is summoned as such, it would be a fraud to resort to homœopathic treatment without full disclosure to the patient of what was proposed" or rather intended, with

how much confidence, we ask, might he take hold of the case of a sunstruck patient, if, instead of believing ice or cold water to the hot and congested head to be the best treatment, he had more faith or more experience with hot water for the purpose of relief; and what a disturbance to calmness and good judgment would be the suggestion of a knowing bystander,—“but hot water is homœopathic treatment, is it not?” We venture to believe that the latter would be silenced by the other on-lookers, whilst at another season, the physician might explain that the principles set forth and exemplified in Hahnemann's *Organon* were written for the enlightenment of the physician, and not for his burdenment or restriction.

CLINIQUE.

INGUINAL COLOTOMY IN THE TREATMENT OF MALIGNANT GROWTHS OF THE RECTUM.

BY H. I. OSTROM, M.D., NEW YORK.

Visiting Surgeon to Ward's Island Hospital, and to the Hahnemann Hospital, New York.

COLOTOMY, and the formation of an artificial anus, will generally be reserved to avert a threatened closure of the intestines, or to open the canal after obstruction has taken place from a malignant growth of the intestine, that can not be removed. The operation, therefore, is not expected to cure, but to palliate; to relieve suffering, and to prevent a sudden and painful death.

The latter must always remain the principal object of the operation, but we should not lose sight of the operation as a means of relieving the intense, and almost constant tenesmus that belongs to malignant growths of the rectum, nor forget this factor when deciding for, or against, the operation. Even if life can be prolonged for a short time only, we may, with reasonable confidence, offer the assurance of comparative comfort, a relief from suffering that outweighs the discomforts of the artificial anus as constructed by modern surgery.

It may, perhaps, be considered unfortunate that the early stages of cancer of the rectum are frequently attended with so little suffering, for the nature of the disease is thereby obscured, and excision of the rectum which in the beginning is practicable, must generally be abandoned in favor of the less perfect operation, colotomy. We have all met with exceptions to this; with cases in which the first indication of local trouble has been severe pain, but generally this symptom does not become pronounced until the disease has invaded structures outside of the rectum, or involved, or pressed upon nerve trunks. The sensation in the rectum is more one of discomfort, and is attributed to hemorrhoids, with which the patients

* Dresden, 1810.

have at some period suffered. Quite recently I saw in consultation a gentleman, aged seventy years, with very extensive cancer of the rectum, who had never suffered more than a slight uneasiness, which he believed to be caused by hemorrhoids. An examination showed the rectum to be involved in the neoplasm beyond the reach of the finger; both sphincters to be entirely destroyed, and an extension of the growth to the sigmoid flexure. At the time of my visit complete obstruction had existed for four days. All operative interference being refused, he died of intestinal perforation on the twelfth day, but not until this took place was there any suffering sufficiently acute to be called pain.

More frequent and pathognomonic than pain, is the tenesmus and urging to stool, due to the mechanical obstruction caused by the growth, and the ulceration which takes place above the obstruction. The natural desire to evacuate the bowels, and the irritation of the fecal mass, add to the distressing symptom. This almost unendurable condition, colotomy is able in a great measure, if not entirely, to remove, for by setting the diseased rectum at rest, and diverting the intestinal canal, the parts cease to be irritated, and soon, not immediately, for it seems to require time to render the rectum perfectly inactive even after the necessity for activity has ceased, the tenesmus and constant desire for stool are almost entirely relieved, and return only when some fecal matter gets down into the intestine below the artificial anus.

Colotomy, therefore, accomplishes two ends, it prolongs life by averting closure of the intestines, and it relieves suffering by removing the irritation that attends the passage of fecal matter over the ulcerated and sensitive tissues.

The dread of having no control over the passage of feces, and all the discomfort which this entails, is, I believe, with modern methods of operating, exaggerated. For, in the first place, the evacuation of the bowels, *via naturalis*, is largely a matter of habit, and can be adapted to the convenience of the individual. And in the second place,—especially is this true in inguinal colotomy,—by making the abdominal incision in the direction of the outer fibres of the external oblique muscle, a certain degree of control is obtained over the artificial opening by the contraction of these fibres. The unfortunate subject may therefore educate his bowels to evacuate at a certain hour, and may, to a considerable degree, control that evacuation by using the abdominal muscles.

The following case of inguinal colotomy contains several points of interest. The early history of the rectal disease included profuse hemorrhages from the bowels, occurring, as far as I can learn, before the presence of a tumor was suspected. A laparotomy was performed six weeks before the colotomy, for the purpose of exploration, at which

time one ovary was found to be cystic, and was removed. The success which followed the operation, in relieving suffering, and in giving control over the evacuations from the bowels.

A CASE OF INGUINAL COLOTOMY FOR THE RELIEF OF CANCER OF THE RECTUM.

In November, 1888, Mrs. H—, aged twenty-five, was referred to me with a history of rectal disease. Her present illness began several years before, with profuse hemorrhages from the bowels. At this time there was little pain in the rectum, and the functions of the intestinal canal continued natural. The hemorrhages ceased several months before I saw the case, since which there gradually developed an early morning diarrhoea, accompanied with constantly increasing tenesmus. The straining at stool was aggravated during the night, and resulted in nothing but the passage of bloody mucous. The tenesmus early spread to the bladder, and required for its relief frequent injections of starch and laudanum.

Upon examination, her rectum showed a very hard, firmly fixed growth, situated two inches from the anus, not involving the rectal walls, and apparently encroaching only upon its anterior aspect. The finger could hardly reach above this growth, but from the feeling and the symptoms, it was probable that here was the seat of stricture and consequent ulceration.

Bi-manual examination discovered a strongly retroflexed uterus, enlargement of the right ovary, and several hard movable tumors, in the lower part of the abdomen.

I opened the abdomen with the object of removing, if possible, the growth which pressed upon the rectum, but which seemed extra-rectal, and of stitching the fundus of the uterus in the wound. The tumor, however, was found to invade the whole pelvis, apparently having its origin from the sacrum. The lower part bridged over the rectum, but polypoid-shaped pieces proceeded from this, passing between the intestines, to which in some instances they had contracted firm adhesions. The right ovary was enlarged, and presented neoplastic changes similar to those in the other pelvic organs. It, together with the Fallopian tumor, was removed.

The situation, extent and attachments of the neoplasm, precluded the possibility of its removal with any prospect of the patient surviving the operation. The abdomen, therefore, was closed, after securing a small portion of the mass for examination.

The patient's recovery from the operation was uninterrupted. While in bed, the former tenesmus did not return, but in two weeks, when she began to walk, as was to be expected, her condition was quite as distressing as before the operation.

As a means of relieving constant suffering,

which was rapidly conducing to a fatal issue, and for the purpose of averting intestinal obstruction, which there was every reason to anticipate would soon become complete, I opened the colon in the inguinal region, six weeks after the first operation.

In making the colotomy, I followed substantially the method of Allingham, with some slight modifications rendered necessary by the peculiarities of the case.

The incision was made in the direction of the fibres of the external oblique muscle, not exactly parallel with Poupart's ligament, my object being to utilize the contractions of the muscle, to gain control of the artificial opening.

With a flat sponge covering the intestines, the integument and peritoneum were joined over the muscular layer with many fine silk interrupted sutures.

The colon was easily found, but unusual difficulty was encountered in bringing it to the surface sufficiently to form a spur. This was owing to the shortness of the mesocolon and the general pelvic adhesions. The plan, therefore, of passing suspending sutures through the mesentery was abandoned, for the tension necessary to draw the posterior aspect of the intestine to the level of the abdominal incision, would have resulted in rupture, either of the gut or its attachments. The intestine, therefore, was drawn out as far as possible, and secured with silk to the edges of the opening. In several places the colon was found to be unusually thin and friable, the needle penetrating the mucosa, causing a wound of all the coats of the bowel. Through two of these openings, feces oozed, and it was found necessary to invert their margins and secure the serous surfaces with Lembert sutures.

A bi-chloride dressing was applied and left in place for two days. When removed, the gut and its line of junction with the integument was found covered with lymph. Sufficiently firm union had taken place by the third day to shut off the peritoneal cavity, and the intestine was then opened. Large masses of exceedingly hard feces were removed from the artificial opening, the bowel at first having no power to expel them. Some of these balls were so hard as to require the use of powerful forceps before they could be broken sufficiently for extraction.

At first considerable difficulty was experienced in keeping the distal end of the intestine clear. It seemed easier for the feces to pass downwards than to escape through the artificial anus. But this was partly owing to the swelling of the mucous lining of the intestine, which filled the opening in the intestine. This effect of traumatism and exposure to air gradually disappeared, and the bowel discharged itself freely through the artificial anus.

The last stitches were removed ten days after

the operation, though the majority of them were allowed to cut their way out, the entire wound healed by first intention, and the points at which the intestine was opened during the operation, probably, also, healed perfectly; they gave rise to no further inconvenience.

After the bowel was empty, a finger introduced into its upper portion would be quite firmly grasped by the contraction, not only of the intestinal circular muscle, but also of the abdominal muscles. This action was at first involuntary, but has become more under the control of the will, and aids materially in guarding the artificial opening.

This patient's present condition justifies the operation, notwithstanding the annoyance and unpleasantness of the new anus. Her life is changed from constant suffering to comparative comfort. Attention to diet, and cultivation of regular habits, insures a fair degree of control of the bowels. The impossibility of forming a division between the proximal and distal sides of the artificial anus by raising the posterior surface of the gut to the level of the integument, in that particular leaves the operation imperfect, but the parts have so adapted themselves to their requirements, that fecal matter passes down to the rectum, only when there is diarrhoea, and is then easily removed by injections from above.

Since the operation, now five months, there have been three attacks of rather severe tenesmus, for which no cause, save irritation of fecal matter, could be discovered. At present there is comparatively little suffering. The patient is able to attend to her social and household duties, and gains strength as the season advances.

The neoplasm continues to grow. The rectum is now closed, it being impossible to pass even the smallest bougie through the stricture, and both the uterus and bladder are gradually becoming involved in the process of degeneration, conditions which point only too clearly to the result, had no operation been performed.

The gross appearance of the portion of the tumor removed was ivory white, intensely hard and with very scanty vascular supply. Under the microscope appeared the nested arrangement of epithelial cells, and the relation between stroma and cells that characterizes scirrhus. The ovary contained cysts, and portions of its stroma presented the same histology found in the other divisions of the growth, a rare disease of the ovary, and probably in this instance secondary to the other pelvic pathology.

A word concerning the risk to life of inguinal colotomy. The operation is not a particularly severe one. With proper attention to detail, it assumes scarcely larger proportions than an exploratory laparotomy. Opening the abdominal cavity should not involve more risk to life than any other simple operation, the risk lies in a great measure

in the necessary and frequently unnecessary manipulations of the intestines that some surgeons indulge in. One of my strictly enforced rules in all abdominal surgery is to keep the intestines out of sight and covered with sponges. Another equally strict rule is to allow no hands but my own to enter the abdominal cavity.

TREATMENT OF WEAKENED RECTI MUSCLES OF THE EYE.

BY CHAS. C. BOYLE, M.D., *O et A. Chir.*,
NEW YORK.

THE treatment and strengthening of the muscles of the eye, which have become weakened from over use, or from general debility, forms a very important factor in relieving symptoms, such as headaches, pain in eyes, confusion of vision, and inability to use them for any length of time.

It is only within the last two or three years that much attention has been paid to it; and even now there are some who do not seem to realize its importance; all they consider necessary is to prescribe a glass for the patient, and if that does not relieve, order them to take a rest or a sea voyage, which probably will give only temporary relief, as their trouble will return on commencing to use their eyes for constant near work. It is as important, in these cases, to strengthen the weakened muscles, as it is to prescribe the proper glasses, if any are needed; in some, no glasses are required, their vision being perfect.

If one muscle is weaker than its opponent, it requires a constant effort on its part to maintain its equilibrium, which is necessary for clear and distinct vision, and which will finally fatigue the muscle so, that it is unable to keep it up, without causing great distress to the patient, it is one of the frequent causes of the constant headaches that many complain of.

Our first business, after testing the vision, is to determine the relative strength of the recti muscles; whether one set is relatively stronger than the opposite. This is done by placing a prism of 7° base down before one eye, say the left, which is looking at some object, as a candle flame, or gas jet, some fifteen or twenty feet distant; this will cause a double vision in a vertical direction, and if the external and internal recti muscles bear their normal relation to each other, the images will be one directly above the other, that belonging to the left eye being above; but, if this normal relation does not exist, and if, for instance, the external is the weaker, the upper image will be towards the left side, the distance being regulated by the degree of weakness of the muscle, which is measured by the number of prism, base outward, placed before the eye, that

will bring the images one directly above the other. If the internal rectus, it will be the reverse, the upper image being to the right side, or to the side of the weaker muscle; and the degree of weakness is determined the same as with the external, except that the base of prism will be inwards, or over the internal rectus.

The next step is to determine the relative strength of the superior and inferior recti, which is done by having two prisms of 7° base toward each other, placed horizontally before the eyes; this will cause a lateral displacement of the images, or homonymous diplopia; if they are on a line, the relative strength of the muscles is correct, but if one is higher than the other, it shows a weakness of one, and the degree is measured by the prism, base up or down according before which eye it is placed, which will bring them on a horizontal line.

After their relative strength for distance has been tested, it is necessary to discover the condition of the external and internal recti for near work or accommodation; it may be that the external are the weakest for distance, and the internal for near.

When we have discovered the weakened muscles, it is then our business, in order to relieve the patient, to strengthen them by a regular system of gymnastic exercise of the muscles by prisms, which is done as follows: the patient looks at a lighted candle or gas flame at fifteen or twenty feet distance, and will probably say he sees only one, but as soon as you put a prism before his eye stronger than he can overcome, he will see two lights which the eye will immediately try to correct by pulling on the muscle that will rotate the eye in a direction that will bring the centre of the retina or macula lutea in such a position that the rays of light entering this eye, that have been deflected from a straight line by the prism, will focus on it, and thus cause single vision. If it is the outer or external rectus the base will be over the internal rectus; if the internal, it will be the reverse. We keep increasing the strength of the prism, as the muscle grows stronger and is able to overcome them, until the desired strength is obtained; it is on the same principle as increasing the strength of the muscle of the arm with dumb-bells, using larger ones as we are able to overcome the smaller.

The standard for the internal rectus is about a prism of 50° ; that for external about 8° , and for the superior and inferior a 3° prism; it will vary in individual cases.

In cases where a patient is obliged to use eyes while under treatment, I often put on a weak pair of prisms, base in such a direction as to relieve the weak muscle of the strain, or if patient wears spherical glasses I have them decentered so as to act as a weak prism; this often affords great relief, but it is not good practice to do this, unless

you are at the same time strengthening the weak muscle, otherwise it will grow weaker still from non-use.

There may be some cases that it will be impossible to bring the muscle up to the proper standard, in that case it will be necessary to weaken its opponent by a partial tenotomy. I will give a few cases from my case, which will serve to illustrate the benefit to be derived from exercising the muscle in this manner.

Miss P——. complained of eyes fatiguing quickly on sewing or reading; vision very nearly normal; required a weak convex astigmatic glass for both eyes, which gave some relief; but it was not until after her internal recti muscles were strengthened by this method that she was entirely relieved. At first could only overcome a prism of 10°.

Mr. W——. Student. Complains of great fatigue of eyes when studying; has a slight degree of hyperopic astigmatism, which was corrected, but he was not able to use his eyes with comfort until the internal recti were exercised and were able to overcome a prism of 30°.

Third case is that of school girl, whose vision was normal; required no glasses, her eyes tired easily while reading or studying. Test showed esophoria or weakness of internal recti; could only overcome in the beginning a prism of 10°; after a month's treatment, she was able to overcome one of 55°, and can now use her eyes without any trouble.

Fourth case was that of a boy with a periodic convergent squint, he had been wearing the proper glasses for some time without curing it. This was due to esophoria or weakness of the external recti, after a month's treatment the squint had disappeared and he was able to overcome a prism of 9° by the external recti.

POTHOS FÆTIDA.*

By S. A. JONES, M.D., ANN ARBOR, MICH.

MISS B——, æt. twenty; a tall spare brunette, and a good specimen of Fothergill's *Arab type*, brainy and vivacious. General health has been good, but she was never robust; could not go to school regularly. Between her thirteenth and fifteenth years grew rapidly in stature, and then she was easily wearied on walking; knees tired and limbs ached. Had good digestion through the growing period, but subsequently became subject to "bloat of wind" in abdomen. These meteoristic attacks came when lying down. A "weight rises from the abdomen up to the heart." She must at once spring up. This condition is relieved by eructating, by liquor, and by drinking hot water. The night attacks of meteorism are by far the worst. *She is now subject to them.*

* An abstract from the *Recorder*.

Patient has found that apples, tomatoes, cabbage and onions disagree with her; no other food. She is constipated—"wants to and can't."

Her hair is unusually dry; scalp full of dandruff; skin, generally, soft and flexible.

She has frequent epistaxis; has had four and five attacks a day. Blood bright red, "runs a perfect stream," does not clot at the nostrils. Has previously a "heavy feeling" in the head, which the bleeding relieves.

In appearance she is "the picture of health;" good complexion, fairly ruddy cheeks, sparkling eyes.

In the latter part of July, 1886, had her first "fit." She had arisen with a headache, which kept on increasing in severity. Just after a light meal had the attack; said "Oh, dear! Oh, dear!" and fell insensible. Stiffened at first, then had clonic spasms. Neither bit the tongue nor frothed at the mouth. No micturition or defecation. On coming to, did not remember that she had fallen, but recollected being borne up stairs. Had a "dreadful nosebleed" after the attack. Left her very weak; could hardly lift her feet from the floor. Before the "fit" the headache had become unbearably severe.

Had her second "fit" on August 7th, 1887. Headache came on and kept growing worse; was in temples, beating and throbbing, and in eyes, "light hurt"—also on vertex, "pressing-down" pain. At 4 P. M. suddenly fell down insensible. No cry. Tongue bitten. Slight frothing at the mouth. First "stiff all over," then clonic spasms. After the "fit" knew that something had happened to her. Was prostrated for nearly a month, not so much as after first attack.

December 10th, 1887, third "fit." On the night of the 9th her mother had been very ill, and she herself was very uneasy and alarmed. Had the attack before breakfast. Blurred vision, headache, fall; no biting of tongue, nor frothing. First rigid, then clonic spasms; after attack, nose bled profusely, head ached all day, face flushed and dark. Prostrated as usual.

In none of the attacks was there any involuntary micturition or defecation, nor was it ever necessary to use any force to hold her on the bed.

One other fact I gathered from her brother, namely: during her "fits" her abdomen bloated so rapidly and to such a degree that the family had learned to remove her clothing as soon as possible after she fell.

Thacher's case, wherein the "abdomen was remarkably tumefied and tense," came into memory at once. The old volume was taken down, and that case re-read. Then Curie's "Jahr." Ah! "*Inflation and tension in the abdomen.*" Only a straw, but a pathogenetic, and I grasped it thankfully. I found also, "*aching in the temples with violent arterial pulsation.*"

My son dug some skunk cabbage roots in a swamp; a tincture was made; ten drop doses, four times daily, was taken until six ounces had been consumed. No "fit" up to date; no epistaxis; only once a slight headache.

I never made a diagnosis in this case; have not reached one yet, nor am I grieving over that omission. I did rashly declare that it was not epilepsy, because Sauvages *tympanites intestinalis* is a feature of hysteria, but not of epilepsy. But not a word of this was said to the patient. It was not a "mind cure," for I have no "mind" to spare; nor was it "Christian science," for I am not up to that. I had an *amnesia* in which grand-mother and grand-daughter participated. Nature had put the "key-note" in italics, not only in the patient but also in the drug. Thacher stumbled upon it empirically; Hering found it pathogenetically, and that led to its application under the guidance of the only approximation to a law in therapeutics that has yet been discovered by any of woman born: *similia similibus curantur!*

"SURGICAL MEMORANDA."

BY ARTHUR T. HILLS, M. D.

Surgeon to Ward's Island Hospital and House of the Good Samaritan Diakenessen.

Epicystic Surgical Fistula for Cystoscopic Exploration; Intravesical Treatment and Drainage.—To Dr. J. D. S. Davis, of Birmingham, Alabama, is due the credit of presenting to the profession the most exhaustive paper upon this very important surgical procedure, and his success has been more than flattering.

Epicystic surgical fistula is the title given to a suprapubic fistula into the bladder, created by the surgeon for exploration, intravesical treatment and drainage. This fistula, acting as an artificial urethra, is capable of giving free access to the inside of the bladder for cystoscopic exploration, and a convenient means of emptying the bladder at will, and for intravesical applications, and imitates nature in the restoration of its own continuity and repair as the pathological changes within the bladder subside.

At the present time epicystotomy has become almost an established surgical procedure, and the dangers incident to opening the bladder through the abdominal wall so slight, that patients suffering from almost any troublesome vesical trouble are encouraged to have the bladder opened for diagnostic purposes and treatment, at a time when the general health remains unimpaired; this is a practice which a few years ago would not have been resorted to by the most aggressive surgeon. Catarrh of the bladder, irrespective of its cause, is always followed by a series of consecutive pathological changes which, independently of the partial or complete interruption of the passage of the urine, tends to destroy life. Dilatation of the bladder and ureters by retention of urine may give rise to such a degree of distention as to destroy life from suspension of important functions by mechanical pressure. During the stage of inflammation a paretic condition may occur, the blood vessels in the vesical wall lose their support, and transudation and exudation take place into the paravascular tissue, which, combined with capillary stasis attending this stage of the disease, results in sloughing, infiltration, pyemia,

peritonitis and death. Damming up of the urine may, and often does, cause surgical kidney, epididymitis and tetanus.

The treatment of chronic vesical catarrh resolves itself into a consideration of the causes producing the disease, among which may be enumerated the excess of certain inorganic constituents of the urine, calculus, stricture and hypertrophy, all of which may be corrected; while others—viz., malignant tumors and certain conditions of the prostate may only admit of a palliation of the symptoms to which they give rise and the removal of which must be the first object of treatment. When a paretic condition of the bladder exists, provision should be made for the complete continuous emptying of the viscus, and the thorough cleansing by frequent irrigation with hot sterilized water and the promotion of a healthy tone in the mucous membrane and muscular structure of the bladder. The frequent introduction of the catheter for drawing off the residual urine and irrigation are in some instances harmful, especially when the silver catheter is used, the soft rubber catheter of Davidson or Jacques being preferable. The operation is best performed with the patient upon the back, although some surgeons claim that the position recommended by Trendelenburg has some advantages, as the elevation of the pelvis helps the surgeon to avoid the prevesical peritoneal fold at the time of the incision of the bladder, which is not verified by others. With the bladder well distended with warm water and a Colpeurynter inserted in the rectum—which has previously been emptied by enema—and filled with warm water. This distention brings the bladder into view above the pubis, the incision into the bladder should be a perpendicular one, from three to four inches in length, made in the median line above the symphysis pubis. The recti muscles are separated to the symphysis, and should the pyramidalis be in the way the fibres should be cut. The transversalis fascia is divided on a grooved director from symphysis to within an inch of the upper margin of the superficial wound. Catching the bladder with a tenaculum on a line with the symphysis, through the prevesical fat, and cutting through with a bladder knife into the bladder with one smooth, clean incision, to prevent undue disturbance of the cellulose-adipose tissue between the bladder and pubis and to avoid infiltration, it is almost impossible to have infiltration, even when no drainage tube is left in the bladder and the urine is left to flow out through the fistulous track and taken up by a layer of absorbent cotton. This operation is generally a comparatively bloodless one, there being but little hemorrhage, and that venous. The finger is carried into the bladder and a thorough search made for tumors, villous growths or foreign bodies. The bladder is emptied and washed out with sterilized water. It is desirable to examine the bladder with cystoscope and surgeon's electric light, that tumors or villous growths be removed if it is practicable, should nothing be found in the bladder, the surgical fistula, should there be no malignancy, will entirely relieve the cystitis. The bladder is allowed to drop back into the pelvis and the superficial wound closed by two sutures, one in the upper part of the wound, and one in the lower. A large rubber catheter is passed through the fistulous opening into the bladder, while its distal end is allowed to enter a urinal placed in the bed between the patient's thighs, or at the patient's side which is more desirable. It is the practice of some surgeons to put in a drainage tube with antiseptic dressing of iodoform gauze around it, but it has been proven that there is no real necessity of it, while if the urine is kept acid by the administration of acid drinks, no better antiseptic could be used for the constant bath of the parts. It should be allowed to flow out through the wound, and absorbed by absorbent cotton placed over the wound. The bladder should be washed out twice daily with hot sterilized water, by means of the fountain syringe, its nozzle being introduced into the urethra, and escaping through the epicystic fistula. At

the end of a week the superficial stitches are removed and intermittent catheterization by the fistula is then resorted to for the purpose of training the fistula and preventing its rapid closure, and not to draw the urine, as the drainage by the fistula alone is admirable. The fistula will be well formed in from twenty to thirty days, and will retain the urine without dripping, allowing a good stream to escape at will.

Permanent after-drainage in all intravesical operations is unnecessary, but it is important to secure good drainage until the paravascular tissue is disengorged, the cystitis relieved and the urine becomes normal and passes through the urethra unobstructed. And until this end is attained, artificial arrangement for the escape of the contents of the viscus should be made. In cases of prostatic hypertrophy or malignant growths, when removal of the obstruction is impossible or contra-indicated, the epicyclic surgical fistula is clearly indicated and necessary. It meets all indications for local treatment, and gives ready and free drainage to viscus and kidneys. Urinary back pressure as the result of incompetency of the urethra from various immovable prostatic troubles is often an immediate and remote cause of surgical-kidney, which can only be removed by suprapubic drainage. In conditions of the bladder, of long standing cystitis in which the urethra, though made competent by cutting, is not sufficient to keep the bladder emptied without catheterization, which procedure in some cases keeps up a constant vesical irritation and inflammation, combined with capillary stasis attending the inflammatory process results in paresis.

"Eye-Strain," Its Bearings Upon the Duration of Human Life (By Ambrose L. Ranney, A. M., M. D., Professor of the Anatomy and Physiology of the Nervous System in the New York Post-Graduate Medical School and Hospital).—Dr. Ranney, in closing, makes the following deductions:

1st. "Eye-strain" arises chiefly from defects in the refraction of the eye and an imperfect equilibrium in the muscles which move the eyes.

2d. These conditions, when present, tend to cause an excessive expenditure of nerve-force by the individual in direct proportion to the amount of defect to be overcome.

3d. Excessive expenditure of nerve-force upon any one organ is commonly made at the expense of some other organ; or, if not, is paid out of the "reserve" of nerve capital possessed by the individual.

4th. The extent of the drafts thus made upon the "reserve" capital and the amount of "reserve capital" are the two factors which can alone determine, in any individual case, how long this state of things can last without causing a "nervous bankruptcy."

5th. The conditions mentioned as those which chiefly tend to cause "eye-strain" are transmitted from parent to child; hence they become operative at birth and last until death, unless mechanically or otherwise relieved.

6th. They are capable of detection and accurate measurement during life by scientific procedures. Some of the methods employed by oculists in testing the eye-muscles are not worthy of perpetuation.

7th. A condition of exhausted nervous vitality is sure to impair the general health in many ways, and to render the individual man more liable to disease than when in full vigor.

8th. Many of the constitutional diseases which ultimately imperil the lives of their victims, are indirectly the result of a state of low nervous vitality (a state which is frequently the result of "eye-strain," from well-understood causes that might have been easily recognized and relieved).

9th. The so-called "inherited predisposition" to certain diseases is unquestionably based, in many cases, upon some anomaly of the visual apparatus. I am so well convinced

of this fact that I assert it without fear of contradiction, from carefully gathered statistics.

10th. The examination of the eye for errors of refraction and accommodation, and a thorough familiarity with the tests lately advocated for the detection of anomalies of the ocular muscles,* ought not to be confined exclusively to the practice of the oculist.

They are as valuable to the general practitioner as are the physical signs of the chest.—*The Medical Examiner*.

The Beverage of Samoa.—From a profusely illustrated series of articles on Samoa in the *May Century* we quote the following: "Hospitality is a part of the Samoan religion, politeness one of their chief characteristics, and a dishonest act the exception. Food and shelter are vouchsafed to every one entering their homes or villages, and the stranger has but to consult his own wishes when he is ready to depart.

"No occasion of ceremony or importance takes place without the use of kava, a root of the pepper family, and all exchanges of sociability are conducted under its influence. The concoction of the seductive beverage made from this root is attended with so many ceremonious observances and acclamations of approval that an account of the customs of these people would be incomplete without reference to the manner in which the drink is prepared.

"A wooden bowl, a coconut cup, and a strainer are the implements used in making the brew. That personage of the chief social importance in Samoa, 'the maid of the village,' is invariably called upon to brew the beverage, which ceremony, with her attendants, she conducts with becoming dignity. After carefully washing out her mouth in the presence of all assembled, she seats herself upon the matted floor with the bowl in front of her, and with resigned manner and preoccupied countenance begins to masticate the bits of root handed her by the attendants. Piece after piece is chewed until the mouth is full and the cheeks bulging, when the mass is ejected into the palm of her hand and with a graceful swing deposited in the bowl. This operation is repeated until the proper quantity of the root is secured. Then her hands are washed scrupulously clean, and an attendant having poured the required amount of water into the bowl, the maid proceeds with the compounding. With a graceful rolling and twisting movement of the hands she mixes all the undissolved portions of the root in the 'fou,' or strainer, which, after wringing, is shaken out, and the straining repeated until the brew is finished."

Myrtol.—Myrtol is a perfectly clear fluid, and represents that constituent of oil of myrrh which boils at 160° to 170° C. Linderm is the only clinician who has instituted any detailed trials with myrtol. Eichhorst himself was first to apply it in gangrene of the lungs. The results which he obtained were so surprisingly favorable that he has used the drug in numerous cases, and is now convinced that, as a disinfectant of the air passages, myrtol has not its equal. The drug is best given in gelatine capsules (à 0.15; prepared in Paris, or by Pohl, of Schönbaum-Danzig). If a capsule is crushed, the peculiar odor clings to the room for a long time, and if a capsule is swallowed, the breath emanates the characteristic odor for many hours, and often for a couple of days. In putrid bronchitis and pneumonic gangrene two to three capsules should be taken every two hours to deodorize and disinfect the parts. The effect is rapid, and a few capsules suffice to remove the bad odor, and often to produce a permanent improvement. The drug is, however, apt to cause a temporary loss of appetite. Myrtol has also been tried against tuberculosis, but the drug has proved utterly useless against the bacillus tuberculosis.—*Therapeutic Gazette*.

* N. Y. Medical Journal, Dec. 4, 1886.

The New York Medical Times.

A MONTHLY JOURNAL

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:

ROBERT GUERNSEY, M.D.

ALFRED K. HILLS, M.D.

Business Communications should be addressed, "Publishers, 526 Fifth Ave.," and Checks, etc., made payable to THE NEW YORK MEDICAL TIMES.

Published on the First of each month.

OFFICE, 526 FIFTH AVENUE, NEW YORK.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 72 William Street, New York.

NEW YORK, JUNE, 1889.

THE HIGHER PLANE.

"If you would lift me, you must be on higher ground. If you would liberate me, you must be free. If you would correct my false view of facts,—hold up to me the same facts in the true order of thought."

IT IS a fact that if we would lift those around us to a higher plane of thought and action, we must be on higher ground ourselves. In order to satisfy one's self as to whether this position has been reached, requires careful examination of the objects and motives which actuate the daily life.

The purpose must be conceived in honor and carried out in the spirit of the Golden Rule!

The purest intentions have been misinterpreted and the authors maligned in the interest of selfishness and dogmatism.

Injustice and abuse have soured many a sensitive organism, and lost to the world some of its most brilliant intellects. Men tire of fighting even for the right, and time the leveler of all things eventually squares the account, but still duty impels the conscientious to adhere to principle, no matter what the consequences, and reinforcement is sure to rally to the cause of the just—in time.

The aims and objects of this journal, for instance, conceived upon the higher ground of independent thought, have been misunderstood and misinterpreted as we think, for selfish purposes, to the shame of some as time will show. In our efforts for the right we shall battle with the conviction that truth will yet prevail, and that the principles for which we labor are everlasting.

In order to liberate others from the chains which bind them to dogmatism and to sect, at the expense of honor, we must be free ourselves. We must be in a position to accept the results of experience, whatever they may be, and no one can do that who is bound by any dogma to the exclusion of these results.

The "school" of medicine to dominate the world, must be free, and to be free the principles upon which it should be founded would command the unqualified assent of all its votaries. This is what no "existing school" can do at present.

There is enough in medicine upon which all can agree, to make a sure and lasting foundation for a "school" that would include all practitioners. Let theories and dogmas which can not be demonstrated to the satisfaction of the great majority, be relegated to the realm of uncertainty where they belong, until their truth can be demonstrated as fact by scientific investigation. When this can be done the world will acknowledge them as such, and no amount of pushing can exact this recognition before.

The "schools" of medicine as such are failures in so far as they have been able to convert the medical world to belief in the tenets which they pretend to teach. The facts have not been held up in the true order of thought, and have not even commanded the respect of laymen. To a certain extent medicine as a science is the "laughing stock" of the other professions, because of ridiculous methods, terrible blunders, absolute failures, ethical modes and the relations of medical men to each other, causes which would be mostly removed by unification of the body medical. The church is even advocating unity, for we find *The Churchman*, in speaking editorially of *Church Unity* says, "The greatest blight which now rests upon the Christianity of this country is due to the needless divisions of Christians. Because of that, and for the sake of it, all the efficiency which comes of unity is sacrificed; and yet, strange as it seems, it is true that those who are most nearly together seem to be least able to come into organized and effectual unity with each other. Every breach healed is a step toward the ultimate unity of the whole flock of Christ."

We have never seen it intimated that the unity of the medical profession is not a desideratum, and a condition that is likely to be accomplished—in time, but few seem inclined to help bring it about. This is the season when the National Medical Societies hold their annual meetings, and we would respectfully suggest to each of these bodies that they appoint a committee of confer-

ence with a view to medical union. If broad, liberal-minded men are appointed on all sides, men who will exact nothing humiliating of each other, they may be able through conference to report a tangible plan for consideration next year.

EXPECTATION.

IT IS a matter of regret that practical medicine should be so slow to absorb advances in medical thought. It is equally a matter of regret that medical men should be so slow to square medical theory conformable to medical fact. Physicians there are in all the schools—and outside of the schools—who are well-informed as to the latest discoveries in the laws of therapeutics, but who, nevertheless, ignore them in practice. They recognize new ideas, but practice upon the old ones. They seem devoid of that higher sense in medicine, so characteristic of the master in medical art, which enables one, not only to recognize a truth or principle, but to make instant application of it to the cure of disease and the intellectual advancement of the profession. And herein lies the difference between the novice and the master, between the tradesmen—we had almost said, the spoilsmen—in the profession, and the typical or ideal physician.

We are led to make these observations by the neglect which Expectation receives as a factor in the cure of malady. It has been known for centuries that the first requisite in the treatment of a patient is to fix his attention upon a person, an object, or a method,—by, or through the means of which he *expects* to recover. The agent employed is generally second in importance. The principle is as essential to the sin-sick soul as it is to the disordered and stricken body. The former clings to the Cross, not because there is any virtue in it as a sin-detergent, but *because it is held up to him*, and the mind of the sinner rests on it, and he is enabled thereby to put himself in an attitude of submission, or to come into a mental condition involving a personal surrender of himself,—which is indispensable to moral regeneration; nature within him does the rest, through the benign principle of Expectation. So it is with him who suffers from bodily infirmity: the efficient agent of cure is within him, while the means employed, exclusive of rational procedures, may be poisonous drugs, the drugless pellet, the charm, or amulet, or repose in the faith of a curative mental agency in the person of another.

Every observant physician must be in possession of facts abundantly to support the truth of this proposition. There is no method of cure that has

a monopoly of success at the bedside. Similar maladies are known to be cured by dissimilar methods and by drugs of opposite and incompatible virtues. If the advocates of the mental method of curing the sick succeed in rehabilitating the medical mind with these truths they will have done a noble work and amply justified the reason of their existence. In a majority of cases of sickness he cures best who drugs least and trusts in nature most. Nature, or the powers of the unconscious, is as beneficent in disease as in health. Her purpose is to preserve and not to destroy. In the midst of morbid causes she struggles to preserve the normal state. The suffering incident to sickness—nay, sickness itself—is due to her warfare against the intrusion of these subverting causes—enemies of the normal, healthy state. If by gentle measures and methods her efforts in this direction may be successfully aided and promoted, is it not the wiser course to employ them? The older and wiser heads of the profession have thought so—do now think so—on paper. Would he not be accounted a fool who should employ a blunderbuss to do that which may be better accomplished with a toy-pistol? If a small dose will effect the object sought for, why give a large dose? When a malady is curable by gentle, persuasive (mental) influences, why give drug remedies at all, which often hinder and do not help? The truth is, doctors, like other folks, are largely creatures of habit, and the habit of drug-giving is coincident with that of drug-taking. And in many cases, the justification of the drug lies in the confidence which the patient reposes in it. It cures often because the patient *expects* it to cure, and not because of any curative virtues in the drug. This is as true of small doses as of large.

Striking illustrations of the power of Expectation may be observed on every hand. The annals of "Mental Science" are full of them. An instructive instance of this power came under our notice some time since. It was a case of spasmodic dysmenorrhœa. The attacks came on after the flow was established. The sufferings were of the most violent character. The young lady had found relief, at the hands of an old school physician, in morphia. Under our ministration she was relieved at various times by sabina; at other times by sugar of milk. But the attacks returned with every monthly period. Finally, she was persuaded to try the so-called mental method, which, to her surprise, proved to be equally efficacious. The devout follower of this method had but to sit down at the bedside of the patient and insist upon absolute quiet and trust on the part of the sufferer, for her to receive prompt and

pleasant relief. Nor was the presence of the practitioner always necessary to give relief on these occasions. So great was the confidence of the patient in the power of this method to relieve her, that when subsequent attacks returned she had only to put herself in communication with the practitioner to be promptly relieved. On one occasion of these attacks a servant was despatched to the residence of the mind curer, conveying information of the fact. The time it would take the servant to reach her residence was carefully computed and found to agree with that when the patient began to feel relief from pain. The thought-influence on the part of the mind-curer, *when brought to the knowledge of the patient*, was as efficacious a mile away as it was close at hand. She confidently expected this result and it came agreeably to her expectation—not, be it observed, by reason of any curative influence exerted or imparted by the mind-curer, but by the patient consciously surrendering herself to the gentle and beneficent influences of her own unconscious mental nature.

Cases of sickness are numerous in the treatment of which the physician needs no resource but that which is afforded by an intelligent application of the mental method—Expectation. Instead of exercising a blind unreasonable faith in drugs, let us exercise greater and a more intelligent faith in Nature, and trust more to her wisdom, especially when our knowledge of remedies fails us. This course is incumbent on the profession, not only in the interest of its own intellectual standing, but in the interest of suffering, ignorant, confiding, bedrugged humanity.

THE opinion seems to be quite general that the physicians who made the *post mortem* upon the late W. I. Bishop, the so-called mind reader, did not exercise due caution in their efforts in behalf of science, to say nothing of the violation of the statute respecting such procedure. We have no data at hand upon which to base an opinion as to whether the man was dead prior to the autopsy, or not, but we must admit that under the circumstances the physicians would have saved themselves an immense amount of trouble, and the public considerable shock, had they postponed their investigations, at least, to accord with the law upon the subject.

The event has drawn out a vast number of opinions, the great majority of physicians claiming that there is not sufficient caution exercised in respect to suspected suspended animation, and we presume all will agree, that it is not a pleasant

anticipation to think of the possibility that one might be "buried alive."

No doubt Bishop's case will make physicians more careful hereafter, but there is little danger of being "buried alive," so long as "funeral directors" continue the practice of embalming, now so universal.

Bishop's condition was brought about by repeated shocks to the nerve centres, by intense mental effort in his attempts to perform tricks, for which he had become famous, and which should have been discouraged by those about him rather than otherwise.

Dr. Wm. B. Clarke, of Indianapolis, has sent us the following abstract of the various tests for life as they appear in our literature:

1. Put a tight band around a wrist or just above the elbow and watch for turgescence of veins at back of hand or along the forearm, as first recommended by Magnus. (It may be enough to tie a string or rubber band around one finger.) If the wrist is used the front arteries should be protected from too much pressure by a cardboard placed under the band.

2. Open a vein at the bend of the elbow and seek for stringy coagula. If found and rigor mortis is present, this is usually considered an absolute sign of death.

3. Apply the electric test for muscular contraction, as first proposed by Rosenthal, remembering that the electrical contraction may continue two and even three hours after real death, rigor mortis not having set in. Rosenthal once demonstrated contractility thirty hours after supposed death, and consciousness returned forty-eight hours after.

4. Make a hypodermic injection of ammonia. If it makes a red blotch life is present.

5. Stick a pin through the skin quickly and withdraw it. If the hole closes there is life, otherwise the hole remains open.

6. Place the fingers between you and an artificial light, and close to it, and, if any rosy tint can be observed, there is life.

7. Do not fail to look for circulatory stains at the dependent points of a body that has lain a long time. If found, it is quite a reliable proof of death.

8. Very fine feathers may be used at the nose and mouth to detect the slightest air current from respiration, or a cool mirror for moisture, and the surface of a tumbler full of water on the chest (every thing being firm and quiet), will record any chest movement. But these little procedures are useless in some cases, as there is no detectable respiration or circulation, though there is life.

9. Dr. Bowen, of Ft. Wayne, says that no one ever dies with tears in their eyes. If tears are found, as in cataleptic patients, there is life.

10. If doubt remains, let the body be kept in a damp room at 85° temperature, and this will most expeditiously bring signs of decomposition or restoration.

The *Penal Code* reads as follows:

§ 308. The right to dissect the dead body of a human being exists in the following cases:

1. In the cases prescribed by the special Statutes.

2. Whenever a coroner is authorized by law to hold an inquest upon the body, so far as such coroner authorizes dissection for the purposes of the inquest, *and no further*.

3. Whenever, and so far as the husband, wife, or next of kin of the deceased, being charged by law with the duty of burial, may authorize dissection for the purpose of ascertaining the cause of death, *and no further*.

§ 309. A person who makes, or causes or procures to be made, any dissection of the body of a human being, except by *authority of law*, or in pursuance of a permission *given by the deceased*, is guilty of a misdemeanor.

THE sudden death of Minister Rice surprised his physicians as well as the general public.

Without knowing the medical details of the case, it seems at least astonishing that he could have died under the circumstances!

Pulmonary oedema, of which Mr. Rice is said to have died, is dependent upon some local cause or an altered state of the blood.

The diagnosis as given by the attending physicians during life, was tonsillitis, certainly not a grave disease. But, yet he died, and what was the cause? We have often noticed the intimate relationship between affections of the tonsils and of the lungs by the manner in which symptoms will alternate between these organs. We have seen an attack of tonsillitis with free suppuration relieve bronchial irritation of long standing, and any attempt to retard the formation of pus in the tonsil with strong astringents, as is frequently employed, has been followed by painful and even alarming symptoms. We do not know the line of treatment adopted in the case above referred to, but we fear it was the routine astringent, which may have been responsible for the terrible result which followed. Our experience would not admit of the use of this means in such a case.

THE subject of fees in hospitals has been intelligently written upon by the veteran surgeon, Dr. Henry J. Bigelow, of Boston, in which he claims that it is disadvantageous to a charity hospital to allow fees to be collected for service within its walls, and does not harmonize with its spirit. While acknowledging the excellent general management of some American hospitals, Dr. Bigelow pertinently says that "in satisfying by a certain luxury of accommodation not inexpensive to maintain, a class of comparatively well-to-do patients who are able to pay their physicians, there is always the danger that such a hospital may drift from its original purpose and become more or less a *maison de sante*, the first object of which is not so much the relief of the poor as the emolument of the practitioner."

He quite justly asserts that "There are many objections to such a practice. In hospitals where there are patients by no means destitute, it would be difficult to restrict it. Permission to seek for a pecuniary advantage would undoubtedly lead to an effort to secure it. And not from the wealthy alone, for it is everywhere the willing patient that most readily pays his physician; the wealthy patient is not always liberal, and others may be liberal beyond their means. Emolument will be obtained where it is sought for. Should the practice begin in the private rooms it will easily extend to the wards. Equally, if fees were allowed for a special class of diseases they would rightly be extended to other diseases.

"Nor could the permission be confined to one class of officers without doing injustice to the rest. The patient after paying his share of the current expenses of the institution and of the interest on the value of its plant, might properly be asked to remunerate not only his medical attendants but other persons. The nurses, for example, might claim with justice that if any service was to be remunerated by a wealthy patient, their faithful attention was deserving of recognition. If not, clearly the training schools for nurses, which supply their attendance, should be remunerated for their outlay. The hard-worked house officers who, except at the daily visit, have chief charge of the patient, who, especially in the surgical service, largely relieve the visiting officer of the onerous part of his daily duty, and upon whose fidelity the patient is dependent for his comfort, should certainly receive their share of any pecuniary reward. Indeed, if the attending physicians are to be allowed to receive fees, why should not the officers of the immense out-patient department be permitted to enjoy perquisites which now are not allowed. A very considerable prac-

tice could be established by them among well-to-do patients attracted to that department by the traditional reputation of the institution, who could be retained by them as their private patients or sent to their friends. The highest resident officer of a hospital, to whom all patients virtually apply, would be also justified in treating medically, out of the hospital, any well-to-do applicant who did not require admission.

"The answer to this is that a public hospital is a trust; originally set apart as a charity for the sick, and not for the pecuniary benefit of their attendants. Whatever in a charitable institution is practiced for this end, leads to its gradual, insidious deterioration. Once allow fees and perquisites within a hospital, the institution would be legitimately worked for all it is worth, and patients who paid their attendants would be not the worst cared for.

"If a hospital is dependent upon legacies and charitable subscriptions, it should be able to go to the community with clean hands. No appeal in its behalf would excite much sympathy were it known that a portion of the money given was to enable medical men to collect fees more conveniently.

"All this may be briefly stated. Whatever diverts the property, the resources or the conveniences of a charity trust, or even the patients who apply there, to the private advantage of its officers, is a form of the spoils system. If wealthy or well-to-do patients are to be from time to time cared for, and there may be occasions especially in surgery when it is convenient to the physician or better for the patient, while the charges should be such that no mere wish for economy would lead them there, any money paid by them should go to the general funds and not to the officers. If the occasion to receive fees occurs rarely, the emolument may be easily foregone, but if it is so frequent that the right is worth contending for, that fact is an objection to it. Prevention is often the least troublesome cure; it is well to distrust any wedge which might open the way to fees.

"The trustee of a hospital, often a much occupied business man, gratuitously devotes ill spared time to its service because it is a charity. The medical officer also can afford to be disinterested; he is already sufficiently benefited by his position and is at liberty to resign it when it is no longer advantageous to him.

"The views here recorded are held by many of the medical officers of our hospitals. They have undoubtedly contributed to the welfare of the institutions. Indeed, of one of these hospitals it was lately said, 'Its traditions and its charities

are at this moment as clean as are its walls and floors.'"

Dr. Bigelow's remarks will apply to other regions than Boston, and we commend his views for consideration to those to whom the subject is of interest.

PULQUÉ, the Mexican national drink, is the slightly fermented milk of the maguey plant, when freshly gathered (according to Dr. Mills-paugh, in the *Hom. Recorder*) it is highly cathartic and unfit for drinking, as it is also on the night of the third day after gathering. The drink is about the color of skim milk, of a glutinous, stringy consistence, an odor somewhat resembling burning rubber, and a taste recalling a mixture of garlic, sour milk, fresh yeast and burned rags; nevertheless, few people who have taken two cups would refuse the third. The effect of pulqué is much more decided than that of double the quantity of lager beer, and when drunk to excess causes a peculiarly pleasant intoxication. It seems to tie the drunkard's legs up into twice the number of knots that whiskey does, but unlike a whiskey intoxication, should the subject fall he regains his feet very quickly and easily. Upon the system, the effect of moderate use of this liquor is to keep the liver and bowels open, and to promote the excretion of urine. Excessive or prolonged habitual use causes enlargement of the liver, a tendency to degeneration of tissues and a variety of complaints attendant upon these disorders.

The preservation and exportation of pulqué to the United States, now being urged, is one of those ventures that gain so much *eclat* in these days, but one that will not bear the test of time. The process of preserving the liquor is a secret, but very likely is based upon the antifermentative action of the salicylates, which, of course, are in themselves more or less detrimental. I venture the opinion that the exportation, when once the furor of novelty has passed by, will be a slow trade.

WE regret to learn that Dr. Frank L. Vincent, an eminent physician of Clifton Springs, N. Y., recently met his death by accident, from an experiment he was performing in his laboratory. Dr. Vincent was a most genial man, an accomplished physician, and his death will be mourned by a host of friends.

A Remarkable Reproduction.—Dr. M. Bertin, of Dijon, having ligated the common carotid for the cure of an "angioma," found, two years later, that a new carotid artery had formed, slightly smaller, perhaps, than the original, but the pulsations were distinctly visible.

BIBLIOGRAPHICAL.

SURGICAL BACTERIOLOGY. By Nicholas Senn, M. D., Ph. D., Professor of Principles of Surgery and Surgical Pathology, Rush Medical College, Chicago, Ill. Philadelphia: Lea Brothers & Co., 1889, pp. 270, 8vo.

Bacteriology having revolutionized the subject of surgical pathology, and as it becomes necessary for the modern surgeon to keep abreast the times, he will find that this book will help him to do so. The work is concisely and clearly done, and appears to embrace about all that is known of the subject to date.

THE PATHOLOGY, CLINICAL HISTORY AND DIAGNOSIS OF AFFECTIONS OF THE MEDIASTINUM OTHER THAN THOSE OF THE HEART AND AORTA. With Tables giving the Clinical History of Five Hundred and Twenty Cases. Being an Essay to which was awarded the Fothergillian Medal of the Medical Society of London, March, 1888. By Hobart Amory Hare, B. Sc., M. D. (Univ. of Pa.), Demonstrator of Therapeutics and Instructor in Physical Diagnosis in the Medical Department, and Instructor in Physiology in the Biological Department of the University of Pennsylvania; Physician to the Children's Dispensary of St. Agnes' Hospital; Member of the American Society of Physiologists, and the American Society of Naturalists; Fellow of the Medical Society of London. Philadelphia: P. Blakiston, Son & Co., 1889, pp. 152.

A most scholarly and exhaustive study upon a subject but little understood by the general practitioner. The book is well worth a place in any medical library.

ATLAS OF VENEREAL AND SKIN DISEASES COMPRISING ORIGINAL ILLUSTRATIONS AND SELECTIONS FROM THE PLATES OF VARIOUS AUTHORS. With Original Text. By Prince A. Morrow, A. M., M. D., Clinical Professor of Venereal Diseases; formerly Clinical Lecturer on Dermatology in the University of the City of New York; Surgeon to Charity Hospital, etc. List of Plates in Thirteenth Fasciculus: Elephantiasis of Leg and of Scrotum, Leucoderma, Alopecia areata, Keloid, Fibroma, Xanthelasma, Rhinoscleroma, Xeroderma pigmentosum.

AMERICAN RESORTS; WITH NOTES UPON THEIR CLIMATE. By Bushrod W. James, A. M., M. D., Member of the American Association for the Advancement of Science; the American Public Health Association; the Pennsylvania Historical Society; the Franklin Institute, and the Academy of Natural Sciences, Philadelphia; the Society of Alaskan Natural History and Ethnology, Sitka, Alaska, etc., etc. With a Translation from the German by Mr. S. Kauffman of those Chapters of "Die Klimate der Erde," written by Dr. A. Woeikof, of St. Petersburg, Russia, that Relate to North and South America and the Islands and Oceans contiguous thereto. Intended for Invalids and Seekers after Health and Longevity, as well as for those who desire to Preserve Good Health in a Suitable Climate. Philadelphia, Pa.: The American Biographical Publishing Co., 1888.

The text is concisely written and well adapted to the purposes indicated, but gives only a bird's-eye view.

The *Annals of Surgery* for May, 1889, has as its leading article a report by Dr. George R. Fowler, of Brooklyn, of a unique case of an air tumor of the neck caused by a hernia of the pleura in a case of pneumothorax. It is well illustrated by a lithographic plate and by a photo-engraving. The editorial articles, which are always invaluable, take up the topics of Injuries of the Heart, the Treatment of Cere-

bral Abscess, Cancer of the Larynx, and the Treatment of Enlarged Prostate by Electrolysis. The Department of Index of Surgical Progress contains an unusually copious and exhaustive series of classified abstracts of articles from foreign and domestic sources, under about forty different titles. The *Annals* continues to maintain its position as a publication of the first scientific rank, one indispensable to every progressive practitioner.

The *Scientific American*, published by Munn & Co., New York, during more than forty years, is, beyond all question, the leading paper relating to science, mechanics and inventions published on this continent. Each weekly issue presents the latest scientific topics in an interesting and reliable manner, accompanied with engravings prepared expressly to demonstrate the subjects. The *Scientific American* is invaluable to every person desiring to keep pace with the inventions and discoveries of the day.

CORRESPONDENCE.

ON DOUBLE REMEDIES.*

I have not studied *materia medica* and practiced with its remedial agents for nearly forty years, without seriously considering some of the dogmas relating thereto.

One of the dogmas enunciated by Hahnemann in his declining years, and adopted by many of his adherents, relates to what has been termed the "Single remedy." Those of you who have studied the *Organon* will remember that after he gives his well-known directions for selecting the remedy, by the totality of the symptoms, he says if the drug does not cover all the symptoms of the malady, but more than any other drug, give the drug thus indicated, and when it has removed the symptoms which it covered, then select a drug which will cover the remaining symptoms. Hahnemann deprecated in his old age the alternating of two or more drugs, no matter how urgent or serious the case.

Since the first decade of my practice I have never been able to reconcile this dogma with the practical facts of therapeutics. I can not believe that the reason he gave for not alternating drugs are valid or based on scientific data. He taught that if two drugs, having a *similar* symptomatology, were given in alternation, or together, that they would antidote each other and prevent the desired curative action. This dogma is in strict accordance with his law of *similia*, but I do not believe it is logically true.

All drugs in their action on the system act along certain lines. Now, I believe I can assert without fear of contradiction that no two drugs, however close they seem to be allied in their symptoms, ever do act along exactly the same lines or paths in the human body, any more than two roads can run in the same line, upon the surface of the earth. No matter how nearly they run to each other, they must run on different though similar lines.

Did it not ever occur to you that in all *similarity* there must be a *difference*? When two sounds or rays of light of exactly the same wave-lengths meet each other, silence or darkness is the result. If two drugs having exactly the same action were administered to the human body, possibly there would be no action. But I deny that there ever was, or that there is now in existence any two such drugs. To use a Hibernianism, if there were two such drugs they would act as *one*. We know that phosphorus and arsenic are isomorphous, or exactly alike in their atomic structure,

* Prepared for the Bureau of *Materia Medica* of the Illinois Medical Association, by EDWIN M. HALE, M.D., but intentionally omitted from the Official announcement of the session or 1889 by the President in his official capacity.

but we know that they do not affect the system in exactly the same way. In view of these facts, I deny that similarly acting drugs can ever antidote or antagonize each other, and I can not see why, according to any logical theory, they may not be combined or alternated if they are indicated by the symptoms, *i. e.*, if the two together cover all the symptoms of a case of disease.

Now that alternation is so universally practiced by our school, there is but little necessity for us to discuss that subject. This leads me to introduce the subject which forms the heading to this paper, namely, *Double Remedies*.

About twenty-five years ago a Dr. Leutze, of our school, a German, and a man of scientific acquirements, published a work on homœopathic practice, in which he recommended certain double remedies. He gave practical reasons, based on clinical experience, why he used them, and why he recommended them. His book was received with almost unanimous disapprobation, in which, I regret to confess, I heartily joined. We opposed this innovation in the same blind spirit of opposition that prompted the Old School to oppose the attenuated doses recommended by Hahnemann. But in after years I had occasion, in some intractable cases, to resort to some of those combinations mentioned by Leutze, especially belladonna and sulphur. I well remember a case of cerebral trouble in a child, in which I had faithfully used each of the above remedies singly, and in alternation, and because they seemed so perfectly indicated, I was disappointed that they did not cure. It then occurred to me to combine bellad. 3d and sulphur 30th, equal parts of the dilutions. This I directed to be given to the patient, two drops every four hours. The good results seemed to me little short of marvelous. This and several similar cases, some of them chronic headaches, so influenced my opinion that I abandoned my opposition, and earnestly began the study of the effects of combined medicines. Later researches into the action of these two drugs have convinced me that, while they have a similarity of action on the brain and its meninges, their action does not follow the same tracts or lines, and that instead of antidoting each other, they really reinforce each other. This reinforcement can be illustrated as follows: If we send one ball or projectile after another, or from the same hand, they will move forward on a similar line, and if they come in contact will not retard each other in any way; and when they strike against a target or opposing substance, the force in which they impinge upon it is greater than one alone. I do not claim that this *simile* is really an explanation of the action of a double remedy, but it helps to controvert the alleged antagonism taught by Hahnemann.

The next combination I tested in practice was that time-honored one, so much in use by the Old School—mercurius and ipecac. I had seen the good effects of this preparation in dysentery and other intestinal disorders, in my father's practice, and now, during a severe epidemic of dysentery, I determined to compare its effects by the side of the two in alternation. I assure you that the result was most satisfactory. (I used merc. vivus 2x and ipecac 2x triturated together.) Now, we all know that while the apparent action of both drugs upon the intestinal mucous surface is similar, their nature and composition precludes any idea that they follow the same lines of action in such tissues.

For many years I have used these and other double remedies, but I have not obtruded their notice upon the profession until lately. There were several reasons for this; one of the most potent was, that while I was a teacher in our medical colleges I felt that I could not project a subject into the class and faculty which was likely to cause dissension. At the same time I did not hesitate, in my teachings of my private pupils, and consultations with professional friends, to impart to them my experience and views on this subject.

The time has now arrived when I have no longer any fear of causing dissensions, nor do I fear invidious obser-

vations. I believe that the judicious use of double remedies will greatly increase our success in the alleviation of suffering, and enable us to combat numerous diseases with greater certainty.

So successful has been my experience with certain combinations, in diseases of the heart, that nothing could induce me to abandon them.

The proportions in which these combinations should be made is a matter of delicate and careful study, but experience will in time enable us to decide.

There has been another objection urged against the combination of remedies, besides the antidotal theory of Hahnemann. It is, that we ought not to use a double remedy unless the combination has been *proved*. It has been asserted that a double remedy would cause symptoms of a new and different character.

A study of chemical combinations has convinced me that this assertion has no basis in fact. There is no warrant for such a theory, and no scientific chemist would dare to assert it. Every simple chemical element is composed of certain molecules. These molecules are composed of an assemblage of atoms. In these atoms reside all the powers and virtues of the drug. Take iodine, for example. Nothing can destroy the identity and power of its atoms. You may combine them with the atoms of mercury, calcium, or potassium, but you do not change the inherent medicinal power of the iodine. That is indestructible. It is so with the atoms of mercury, calcium, or any other element. When you combine them with iodine they are not changed.

For this reason I contend that if we had provings of all the simple elements, there would be no need of having provings of their chemical combinations.

The iodides of mercury contain no symptom-causing power not possessed by iodine and mercury. Complete provings of iodine and mercury would give us all the symptoms we could get from provings of iodide of mercury.

If you want to build up a pathogenesis of two drugs, *e. g.*, picric acid and zincum, all that is required is to consult the pathogeneses of the two. If you will do this, and then compare with them the provings of picrate of zinc, you will find no essential difference. In this manner I have introduced into practice, and used successfully, many new combinations. I find that the chemical substance which has the greater number of atoms in the combination, will become the ruling drug, *i. e.*, the greater number of symptoms will belong to that drug.

Take for example the proto-iodide and biniodide of mercury. The proto- has more mercury symptoms, and the bin-iodide more iodine symptoms, in its pathogenesis.

In the case of remedies from the vegetable and animal kingdom the same law will hold good. I first discovered this in experimenting with certain remedies in cardiac diseases. The first double remedy I used was the union of digitalis and strychnia. The tablet I use contains 1-10 gr. of digitalis leaves, and 1-100 gr. of strychnia, or the 1x trituration of the former, triturated with the 2x of the latter. Some of my colleagues have asked me, What are the indications for the use of this? My answer was, and is: Consult the pathogeneses and clinical records of the two drugs. The former acts principally upon the cardiac system of circulation and the sympathetic nervous system; the latter upon the spinal cord and its system of nerves.

Now, in a large proportion of diseases of the heart, both systems are disordered, and we must select remedies which will act upon both. No one remedy yet discovered affects both systems to the extent of representing both drugs in one.

In hypertrophy with dilatation, irregular and intermitting pulse, venous stasis, deficient innervation, and mal-assimilation of food, the above combination has wonderful restor-

ative powers. In the pathogenesis of both you will find all the symptoms you require.

The question may be asked. Why not alternate them, instead of giving them simultaneously? I answer that by alternating them you do not get the coincident power of both drugs, which I consider of the greatest importance. I need not explain at length the reasons which have led me to this conviction, for they will be patent to all of you when you reflect candidly upon the subject. I am not alone in the use of these double remedies. Some of our best men have used them for many years. You may not be aware of the extent to which they are used. I confess I was surprised at the result of my own inquiries. I found on sale at the pharmacies of Boston, New York, Philadelphia, Chicago, St. Louis, Detroit, and other cities, a long list of double and triple remedies.

One singular and suggestive fact exists, which should arrest your attention, namely: Not one of these double remedies originated in our pharmacies, but were prepared solely because they were ordered by customers, physicians of our school of medicine.

EDWIN M. HALE, M.D.

NOTE.—An abstract from advance sheets of a new journal, the first number to appear in July next, entitled "New Remedies." Edited by James E. Gross, M.D. Gross & Delbridge, Publishers.

JUDGE BARRETT'S OPINION.

To the Editors of THE NEW YORK MEDICAL TIMES:

The opinion of Judge Barrett, as given in your April number, upon the legal right of homœopaths to practice anything except homœopathy, while it is of course conclusive as to the special question involved, appears to me to indicate rather a curious misapprehension of the real point of difference between the opposing medical armies. Judge Barrett says: "If I call in a medical man who designates himself a 'Homœopathic physician,' it is because I do not wish to be treated allopathically, or eclectically, or otherwise than homœopathically. . . . If there be any variation from that method, I have a right to be informed of it and to be given an opportunity to decide. . . . An honest 'Homœopath,' who has not succeeded, after doing his best with the appropriate homœopathic remedies administered on homœopathic principles, should undoubtedly try something else which he believes may save or relieve his patient. But when he reaches that point, the duty of taking the patient into his confidence becomes imperative. The patient may refuse to submit to the other system or he may agree, but may prefer a physician whose life has been specially devoted to practice under that other system. He may say, well, if homœopathy can not save me, I prefer to go to headquarters for allopathic treatment."

"All this is the logical sequence of the particular designation 'Homœopathist.' There may, of course, be gentlemen who in a general way favor the principle of small doses and 'similia similibus curentur,' to whom it would not apply. But such a physician would not stamp his school upon his work as a practitioner. If I call in such a man—I mean a physician pure and simple, calling himself neither homœopathist nor allopathist—the implied understanding is that I entrust myself to his best judgment in all respects. . . . But if a physician calls himself allopathic and is summoned as such, it would be a fraud to resort to homœopathic treatment without full disclosure to the patient of what was proposed. If, however, we are to have a class of men who purpose, in the interest of humanity, to utilize the best that they can find in any and every school, 'pathist,' as a designation of fixed methods of practice, must be ignored, and the broad and noble title 'physician' in its unreserved sense, be revived and substituted."

It is evident from this presentation of the case, that Judge Barrett supposes there are three leading classes of medical practitioners, from whom the public are at liberty to choose, viz., the homœopaths, the allopathists and those liberal, truly scientific physicians who make "unprejudiced use of the ripest fruits of modern discovery in every field." But with regard to the second-named class, is there actually any body of men, now-a-days, who call themselves "allopathists," or who profess to practice upon the allopathic principle exclusively, as homœopaths are popularly supposed to practice upon the opposite principle? The answer must be, that no such class exists. The term "Allopathist" was invented by Hahnemann, and has never been adopted by educated physicians anywhere. Judge Barrett could not find in all New York a single reputable practitioner who would avow that his life has been specially devoted to practice under the "Allopathic" system, or who would not laugh at the idea that it would be a fraud for him to resort to homœopathic treatment (or any other that he might deem appropriate) without previously taking the patient into his confidence. In short, Judge Barrett's opinion has practically no application excepting to the so-called homœopaths,—because of no other sect in medicine can any thing be said like that which Dr. Beckwith (as recently quoted in the TIMES) so truly says of these pretended disciples of Hahnemann: "When I first began the practice of medicine, homœopathic physicians practiced Homœopathy. Now, with the large majority the practice has become scientific (?) eclecticism, which the student is taught in offices, in societies and in colleges."

The correct view of this whole matter, and that which will undoubtedly be taken by the intelligent and unprejudiced portion of the community, is very clearly presented, I think, in the subjoined editorial from the *Druggist's Circular*.

G. L. F.

TROUBLE FOR THE "PATHIES."

The opinion of that eminent jurist Judge Barrett, which is given in full in another column, will be a surprise to many. It opens up an entirely new idea of malpractice and may lead to considerable litigation. Hereafter practitioners will have to honestly adhere to that special mode of practice or "pathy" that they claim to represent, or run the risk of losing their fees and defending a suit for damages. In view of this opinion of Judge Barrett, practitioners who do not confine themselves strictly to the homœopathic methods, are unsafe in calling themselves homœopathic physicians. There is no objection to a physician saying: "I practice homœopathically when indicated," for that would imply that other methods are employed, but none excepting those who absolutely confine themselves to the homœopathic mode, have a right to designate themselves other than as physicians.

When the public seek treatment for their ills from a homœopathist they should get what they pay for, and not a counterfeit article. For many years a wholesale system of humbugging of the people has been going on, and it is nearly time that something was done to check it. It is a very rare exception among physicians calling themselves homœopathic to discover one loyal to the system he pretends to follow. It is as if druggists should go into a wholesale system of substitution on all prescriptions put up. Who would pretend to say that that would be right? When a man calls for a certain article for which he is willing to pay, there is neither honesty nor honor in supplying something else, without informing him of the fact that such a change has been made. It is useless to say that the substituted article is better than the one called for. The purchaser should be the judge of that and not the seller.

That there is a little truth in the shibboleth of homœopathy every honest medical man concedes; that it is universal in its application they all deny. The attempt to support it as a distinct system and maintain teaching col-

leges to promulgate such a dogma as all-embracing is a detriment to medicine, science and humanity. The people, seeing what they believe to be two hostile camps in medicine, while at the same time they are conscious of the unity of truth, become at once skeptical of both. To this is due very much of the disastrous attempts at self-medication with patent medicines, faith cures, etc.

The people should be taught what is in practice a fact, that the only real difference between physicians who do not designate themselves as "pathists" and those who do thus stamp themselves is that the former, true to their claims, confine themselves within no limits save those of experience, while the latter are their servile imitators, but use every means in their power to hide from public gaze the fact that they are humbugs and imitators.

A true disciple of Hahnemann should be honored in honestly upholding a system which he conscientiously believes in. A humbug who pretends to be one thing while in fact another, deserves only contempt.

Could the public be taught that all experience proves homœopathy, allopathy, hydropathy, electropathy and all the other "pathies" as only applicable each within a narrow sphere, and that a scientific medicine includes the good contained in all, it would be a great aid to future progress. As it is, the sullen, selfish quarrels of narrow exclusivism hold back progress, and the pseudo homœopathist is largely to blame for it.

The old allopathist died long ago, leaving as his successor one who now properly ignores whatever refuses to stand the test of common experience, and who frankly confesses that in some forms of disease the most efficient remedy acts or seems to act on the principle of similarity. He is, however, equally positive in avowing the impossibility of securing good results in other forms by any such line of treatment. When called to the bedside of the sick he is unhampered by any hobbies or system, and seeks the best and latest offerings of science to relieve his patient, not asking nor caring whether it is homœopathic, allopathic or any other "pathic" in its theory or method of cure. In his study as a scientific man the honest physician is anxious to know all he can discover about the process by which the cure was wrought, but when by his patient he only seeks results.

TRANSLATIONS, GLEANINGS, ETC.

RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS.

Regular Respiration in Sea-Sickness.—Dr. J. J. Leiser writes in *British Med. Journal*: "On a recent voyage across the Atlantic, I made some observations on the matter of sea-sickness. It was evident to me, first, that respiration was imperfect; it was governed by the motions of the boat. One not used to the sea, and the same with him not used to a high sea, holds his breath as the ship is tossed up or down, catching it only at the turns, or, if the waves are great, only gasping for it. Thus are the respirations infrequent and imperfect, with very apparent results. The blood so inadequately aerated must necessarily be poisonous to the brain, and the sympathetic sickness is quite understandable.

"The experiment I made seemed to prove that the irregular respiration was not secondary to the sickness. A system of regular, free breathing prevented sickness, or rapidly relieved it. One must sit and give his attention to it, must breathe on time, with full and regular inspirations and expirations."

Dr. Leiser's experiments were repeated by Drs. Stockman and Prentice on an Atlantic steamer in a very heavy sea.

They write: "We went to work and secured ten unfortunate individuals whose gastric regions were going through convulsive contortions, and making their lives miserable. We seated our patients on deck on the fore-part of the ship, where the pitch was most considerable. Dr. Prentice seated himself with five, and I took the other five under my care. We timed the breathing in the following manner: we raised the hand from the knee, indicating an inspiration, and down again for an expiration. We had a quarter-second stop watch, and timed the respirations to exactly twenty per minute. At the expiration of one hour the active symptoms in each case had entirely subsided; of course this does not mean that all the faintness and tendency to nausea in each case had entirely subsided; in a few of the cases these still continued. By this time we had thoroughly educated our patients in the *modus operandi* of the cure. With one exception, a case at first the mildest of the ten, but who obstinately kept his berth and refused to continue the treatment, and remained sick throughout, the cases continued permanent cures."

Ipecacuanha in Pustula Maligna and Anthrax.—Dr. Edwin Muskett (*Allg. Hom. Zeitung*, Dec. 6, 1888) reports that he has successfully treated during the last fifteen years fifty cases of malignant pustule. In the five cases which he singles out, he invariably had excellent success, inducing a decided amelioration of the general condition within a few hours; the delirium ceases, fever diminishes; the pustule becomes smaller the next day, the eschar loosens, and the wound heals rapidly. The doctor contrasts these good results with the method of energetic cauterization, and declares cataplasms to be absolutely dangerous.

Just as quinine is a specific for intermittents, and mercury for lues, just so the writer declares ipecacuanha to be a specific for malignant pustule and anthrax. The fact that similar good effects do not obtain in furuncle, is accepted as evidence that anthrax and furuncle are not identical.

Muskett mixes the powdered ipecac with water and glycerine to a paste, using more glycerine than water, this paste is then spread directly upon the pustule and its surrounding edematous tissues. Internally he prescribes at the same time two to three grains of ipecac, twice or thrice daily.

Passiflora Incarnata for Sleeplessness.—*Passiflora incarnata* (white passion flower) is a peculiar remedy, which has never been proved, but, says Hale, "deserves to be." A prominent characteristic to which attention is called by the *Hom. Recorder* (July 15, 1888) is its sleep-producing power. Dr. W. B. Lindsay, of Louisiana, wrote concerning this remedy after having used it for thirty years: "I am satisfied it is no narcotic. It never stupefies or overpowers the senses. A patient under its full influence may be wakened up, and he will talk to you as rationally as ever he did; leave him a moment, and he will soon be off to the elysian fields again. I have tried it in all sorts of neuralgic affections, and have usually astonished my more enlightened patients with it. Many times they have asked me what in the world it was that had such a sweet influence over them." From Dr. Stacey Jones's work, *The Medical Genius*, we quote: "*sleeplessness—neuralgia—convulsions—spasms—tetanus—passiflora incarnata*, adult, thirty drops of the tincture every hour, produces quiet, pleasant sleep, altogether different from the stupor of nausea. Even in the worst forms of sleeplessness, as that associated with suicidal mania, the drug produces quiet slumber, from which the patient awakes with a clear mind. In ordinary doses given every one-quarter to one-half hour it completely controls convulsions, spasms, lockjaw. It never fails to cure lockjaw in a horse. In the treatment of erysipelas no remedy acts better than *passiflora*, given in ordinary doses, as often as occasion seems to require.

Cineraria Maritima in the Treatment of Cataract.—A

member of the profession, in a letter addressed to the superintendent of the Botanical Gardens, Trinidad (published in the *Pharmaceutical Journal*), asking for a supply of the juice of *cineraria maritima*, gives a wonderfully interesting account of its curative effects, and its therapeutic action in the treatment of cataract, says the *London Medical Press*. It appears, from the letter, that Dr. Mercer, the gentleman referred to above, formerly practiced his profession at the Port of Spain. Six years ago he came to London, and submitted to the right eye extraction. This operation appeared to be a failure, and at the same time the cataract in the left was rapidly advancing, so much so, that he at once decided on returning to his friends at Trinidad. There a friend persuaded him to make trial of the juice of a plant extolled by the natives—*cineraria maritima*. Being, he says, without any hope of saving even a glimmer of sight, he at once assented and commenced by instilling a drop or two into each eye three times a day. It proved most efficacious, and "whereas he was blind," in the course of a few weeks he was able to see and read the hour of the day by his watch. The improvement in four weeks was very marked, and he can now count fingers with the eye operated on, and which he thought was wholly lost. All this has come about in the short space of two months. The application produces no irritation beyond a slight burning sense of pain which lasts only a couple of minutes, and is followed by a profuse lachrymal discharge. The juice of the leaves of the matured plant acts better than those of a younger growth, but there appears to be some difficulty in keeping up the supply, and consequently the superintendent of the Botanic Gardens, Trinidad, has thought fit to communicate this to Mr. Thistleton Dyer, director of the Royal Gardens, Kew, and who will doubtless see the want speedily supplied.

Lappa Major in Cholera Infantum.—Dr. G. T. Hardin says, in the *Medical Advance*, lappa major is used very extensively here as a preventive of and as a remedy for fully developed cholera infantum. I have known a number of desperate cases cured by its use. The root is made into beads and strung around the neck and every three or four weeks are changed for new ones. It is an old woman's remedy, and I was disposed to laugh at it until it earned its reputation by its cures.

Santoninoxym as an Anthelmintic.—Coppola (*Deutsche Med. Woch.*, No. 28, 1888) has reported experiments on dogs with santoninoxym, a body similar in composition to santonine, and produced from the latter. Given in doses of one gram (15.43 grains) internally, the animal's general condition is not changed, while after a similar dose of santonine convulsions ensue.

Coppola has established by experiments upon himself and others that santoninoxym appears in the urine about four hours after its ingestion, while santonine appears after half an hour. The santonine is thus shown to be sooner absorbed than santoninoxym and produces some toxic effects. Both drugs are about equal in anthelmintic effect, and Coppola predicts that santoninoxym will displace santonine. Santoninoxym was discovered by Lanizard in 1885.

Aesculus Glabra.—Dr. J. M. Scudder, in the *Eclectic Medical Journal*, says: "You will be surprised to find how many cases of winter cough, with great bronchial irritation, hypersecretion, and difficult breathing, are met by the tincture of aesculus. The diagnosis is not difficult—great difficulty in respiration. You will probably remember this as my remedy for asthma, especially those cases in which the difficulty of breathing persists, and is not paroxysmal." The dose recommended is from ten to thirty drops in a glass of water; teaspoonful every two or three hours.

Urticaria as a Process of Treatment.—Frankworsky (*Fortschr. Der Medic.*, 1888) urges flagellation of the skin with nettles as a very efficient remedy in anesthesia, par-

alysis, and neuralgia. He has witnessed good effects from the same in locomotor ataxia. In asthma, dyspnea, amenorrhea, virile impotence, and rheumatic pains, it regulates the disordered functions. In favor of this procedure he cites the rapidity of its action, its innocuousness even after prolonged use, and the total absence of all irritation of the kidneys arising from it. It leaves no scars, and gives rise to no suppurating surfaces on the skin. The flagellation may be either local or general and should be continued until bullæ form. Its action is stimulating and refreshing, and highly appreciated by the patients.

Berlin Wool for Sore Throat.—In *Archives of Pediatrics* a treatment is recommended which consists merely in placing round the neck from ten to twenty threads of Berlin wool. This must be worn continuously night and day, and not taken off except for the purpose of making ablutions. With some cases it is necessary that the wool be worn all the year round; with others, during the months when the complaint is likely to return. When it is thought desirable to discontinue its use, it should be done gradually by discharging a single thread each day until none are left. If objected to on the score of unsightliness, a small coin or locket may be attached, which will effectually keep the wool out of sight, and, after a time, out of mind. Laryngitic and tonsillitic forms of disease, which are especially prevalent among children, are due in very many instances to exposure and cold, and are particularly apt to recur periodically, especially in the colder and more changeable periods of the year. It is in such cases that the treatment is productive of marked benefit.

A considerable number of cases, both among children and adults, have been thus treated in our practice. Observations as to its efficacy have extended over a number of years. Strange as it may seem, scarcely in any single instances has it failed in our hands to avert future attacks.

Internal Use of Chloroform.—Stepp (*M. Med. Woch.*) has experimented with chloroform in the treatment of different diseases, without always obtaining the results which might have been expected considering the reputation of this agent as an anesthetic. It appeared to act well in cholera morbus, when combined with opium, and with bismuth in a series of cases of gastric ulcer; also in typhus; in tuberculosis and diphtheria the results were negative. The daily quantity given was 0.5–1, 6. chloroform to 150 water, or better in syrup. It has a sweet taste, followed by burning and pricking, and leaves a sensation of refreshing coolness in the mouth. Oil of peppermint forms the best vehicle for its administration. No narcotic effect, even in children, was observable from its use.

Chloroform has been found remarkably efficacious as a mouth-wash and gargle. The author, indeed, calls it "the ideal medicament" for the oral cavity and adjacent parts—unequalled in their most widely differing diseases, in affections of the gums, etc.

Hot Pack in Pneumonia.—Dr. Carpenter (*Medical Brief*) writes: Four years ago I was attacked with pneumonia—on the left lung—dyspnea severe, pain excruciating; friends all thought I must die from suffocation. One of them, a homœopathic physician, called on me and gave the best consolation he could by saying: "you know, doctor, few people ever recover at your age from pneumonia." "Well, doctor," I said, "I am going to get well." I had myself placed in a reclining vapor-bath, and steam raised to about 110° to 130° F.; remained in it about two and a half hours; was free from pain and dyspnea; began to cough and expectorate a little bloody sputa; was sick with fever a few days, but by the use of hot water packs over and around my body an hour or two every day, and cathartics and quinine, I was able, in two weeks, to perform my usual amount of labor.

Again, two years ago this winter, I was attacked with pneumonia of the right lung; about the same symptoms. Hepatization of nearly the whole lung took place. My

homœopathic brother and two regulars, all volunteered to prescribe for me, like good men, as they were, and all said it was very doubtful. I could not follow their treatment or advice—would immediately grow worse—and again resorted to the steam and hot pack, and in two weeks began to attend to business, and have not lost a day since.

My own, and other cases, have convinced me that pneumonia is a curable disease. I have not lost a case in ten years, and do not expect to lose one in ten years to come, if I live to treat them. That it is a self-limited disease, if let alone, I have no doubt, but am equally confident that it may be aborted at any stage, by judicious treatment; but never without first removing the cause and equalizing the circulation. Opening the pores of the skin and stimulating the capillary glands has been the sheet anchor of my hopes for years.

Quassia in Drunkenness.—A half ounce of ground quassia is steeped in an ounce of acetic acid, adding a pint of water before steeping. A teaspoonful in a little water should be taken every time the liquor thirst is felt. It satisfies the craving and produces a feeling of stimulation and strength.

Ulexine.—Ulexine is an alkaloid derived from the seeds of genista, or common gorse. It is crystalline in form, has a bitter taste, and is soluble in water. In medicinal doses it first acts as a stimulant, and then as a depressant of the respiratory mechanism; in larger doses it paralyzes respiration, slows and weakens the pulse, and finally causes narcosis through its influence on the nervous system—the muscles retaining their nervous excitability till death. It also has a powerful effect on the kidneys, causing constriction, followed by a very large expansion of short duration. Ulexine is a more powerful diuretic than sparteine, or preparations of sarothamnus scoparius, and has been used with great success in cases of dropsy due to heart disease. As an antidote to strychnia, it not only prevents the onset of the strychnia convulsions, but has the power of checking them after they appear. The dose varies from 1-20 to 1-60 of a grain. The liquor ulex. Diureticus is the only preparation to be had so far.

Piper Methysticum in Toothache.—Almato (*Rev. Hom. Belgæ*.) finds piper methysticum especially indicated where the excessive toothache is accompanied by severe earache, and gives us verifications in some cases.

Gelsemium.—Garland, in the *Boston Med. and Surg. Journal*, gives his experience with this potent drug. In the paroxysms of hysteria he recommends gelsemium above all other agents, pushing it until diplopia and ptosis appear. Catarrhal headaches and those which accompany dysmenorrhea and nervous debility from over-work are amenable to gelsemium. Neuralgias of the superior branch of the fifth nerve are also relieved by this drug, if not due to inflammation. The headaches of Bright's disease are also mitigated by gelsemium; but not bilious or sick headaches. In the early stage of acute bronchitis, when the cough is bad, the tubes dry and there is pain in the chest, gelsemium relieves the distress, starts the bronchial secretion and lessens tension. This drug is an unfailing diaphoretic. Follicular tonsillitis, with acute febrile symptoms, is quickly relieved by this diaphoresis; as is also acute myalgia. Gelsemium will allay excitable reflexes, lessen the nervousness of passive cerebral congestion, and is said to give good results in acute meningitis.

McKay recommends it in ague, giving one-quarter to one-half drop doses of the fluid extract every twenty minutes, commencing three hours before the expected chill.

Davis gives small doses to relax a rigid os, and for after-pains.

Chamberlain gives it with quinine to prevent ringing in the ears.

The dose for neuralgias is three to five drops of the fluid extract every half hour or less, according to the pain.

To produce sweating, one drop every half hour is suffi-

cient. One drop every hour will relieve bronchitis. In case an over dose is taken, morphine is the antagonist; also, digitalis, ammonia and alcohol.

In moderate doses it slows the heart, lowers muscular force and sensibility, causes ptosis and dilated pupils, with diaphoresis. These symptoms should be produced in order to relieve neuralgic pain.

Hot Water in Gastric Hemorrhage.—The safest and most pleasant remedy for hematemesis is said to be water, drunk as hot as can be borne, in quantities of a half-tumblerful to a tumblerful. No further hemorrhage occurs, and fragments of clots are vomited.

Condurango in Carcinoma of the Stomach.—Riess wishes to limit the use of this remedy (the bark of *gonolobus condurango*, Richard, or *marsdenia condurango*, Brown, an asclepiadacea indigenous in Ecuador and Peru) entirely to the treatment of carcinoma of the stomach, and from his experiences in eighty cases treated with, and in one hundred and sixteen cases treated without, condurango, pronounces for its specific action. Professor Ewald (*London Medical Recorder*, Aug. 20, 1888) does not deny the favorable effect of condurango on the general condition of patients suffering from carcinoma of the stomach. He says: "It improves the concomitant gastric catarrh, and, having the same favorable effect in general muco-catarrrhal diseases of the stomach, the condurango proves an excellent stomachic in all the cases in which there is a genuine catarrh of the mucous membrane,—i. e., the secretion of a muco-serous, more or less purulent, fluid."

Hot Air Inhalations in Phthisis.—According to the *Lancet*, Sept. 29, 1888, Dr. Weigert, who appears to be an American living in Berlin, finding that tubercle bacilli outside the body die at a temperature of 106° F., and are adversely affected by one of 100° F., had constructed an apparatus for the inhalation of heated air, and commenced to make trials on phthisical patients in the early stage. At first a temperature of from 104° to 140° was employed, the air for inhalation being quite dry. This temperature was gradually raised as high as 175°. The patients bore this hot dry air exceedingly well, and continued to inhale it for three or four hours a day during a month, the only unpleasant effects produced being hyperemia and dryness of the mucous membrane. The general effects are represented as having been remarkable, patients who had been falling away picking up strength and becoming quite robust, the physical examination showing at the same time that the dullness and râles had perceptibly decreased. The bacilli in the sputum, which had been very numerous, rapidly diminished in number, and finally disappeared altogether. These observations were confirmed by several other medical men. Dr. Halter, of Lengerich, Westphalia, seems to have gone even further than Dr. Weigert, he having himself inhaled, and caused patients to inhale, dry air heated to 374°; according to his report the results were satisfactory.

Hydroleine has shown results that no other preparation of cod liver oil has. It is better borne by many stomachs, rarely causing eructation, and taken before the meal largely increases the appetite without causing indigestion, and thus augments the body weight in a satisfactory manner. The present mode of preparation has greatly improved its stability.

Oxygen in Pneumonia.—Dr. H. M. Dunlap, writing in the *American Lancet* of the use of oxygen in pneumonia says: "I have seen the cyanotic face, with lips almost purple, brighten and assume a more healthy color in a short time under the inhalation of oxygen, and not only is there an improvement in the countenance, but the patient experiences a sense of relief from the distressing dyspnoea which, I believe, could not be afforded by opium or other narcotics, while it is entirely free from the deleterious effects these agents must have in cases of this kind. The patient who has been unable to sleep will drop into a quiet

slumber, lasting for a longer or shorter time, as the case may be. Every means should be used just as we would do without the use of oxygen. In order to obtain good results with this, as with all remedies, it must be properly applied to suitable cases. Oxygen is not indicated in every case of pneumonia by any means. It is in those cases of extensive involvement of the lungs, or where there is lack of oxygenation of the blood as evidenced by the cyanotic condition of the patient that this method is especially indicated and in which the best results are obtained. However, it is not well to delay the use of this remedy until these symptoms are developed to a very marked degree lest our patient be too far gone to rally and our efforts prove of no avail." He generally gives inhalations of oxygen and air, equal parts, but when the patient is very weak he gives the gas pure.

Something Electricity is Doing.—Under the title "Something Electricity is Doing," Charles Barnard writes in the *March Century*:

"To the student of social science the electric motor is full of suggestions for the future. If power can be subdivided and conveyed to a distance, why may not our present factory system of labor be ultimately completely changed? To-day we find sewing women crowded into a hot, stuffy room, close to the noise, smell, dust, and terrible heat of some little steam engine at one end of the room. Let us see how the work may be done with motors. The building is lofty and of light construction, and yet we find in the bright and pleasant attic above the housetops a hundred girls, each using power. They are seated at long tables, each one having a sewing-machine, and secured to the underside of the table is a small electric motor, one to each machine. The operator has only to touch a foot-pedal and the motor starts, giving about one-tenth of a horsepower, at very high speed. If the speed is too fast it can be regulated at will by the pressure of the foot on the treadle. There is no heat, no dust or ill-smelling oil, and only a slight humming sound, the sewing-machine itself making more noise than the motor. The room is sweet, clean, and light, and it is in every respect a healthful workroom.

Stuttering.—It is a well known fact that stutterers, when speaking in a whispering voice, show no impediment of speech. This fact has been turned to account by Coen. His method of treatment is as follows: In the first ten days speaking is prohibited. This will allow rest to the voice and the apparatus concerned in articulation, and constitutes the preliminary stage of treatment. During the next ten days speaking is permissible in the whispering voice, and in the course of the next fifteen days, the ordinary conversational tone may be gradually employed.

Alcohol.—Among the curious side issues of the current temperance discussion is the question whether alcohol is a natural product. This is, I believe, vigorously denied in some quarters. Alcohol, like bread, is manufactured artificially from a natural product. In each case fermentation, a natural process, is made use of. But while bread is known only as a product of manufacture, alcohol appears to be very widely distributed in nature, though in extremely minute quantities. Nor is this at all surprising. If grapes or apples, or their juice, be exposed to the air, fermentation sets in and the sugar and other carbohydrates are changed to alcohol. The ferments which cause the change are afloat in the air all about, and might not unnaturally attack similar compounds in other vegetable substances.

The moral argument against alcohol seems to me invincible. It is not certainly strong enough when the facts

are adhered to, without the exaggerations into which earnest reformers, in the intensity of their convictions, are sometimes led?—From Prof. Atheater's article in the *May Century*.

Medical Aphorisms.—A correspondent, signing himself "Artz," sends to the *Canada Lancet* the following professional aphorisms of Amédée Latour:

(1) Life is short, patients fastidious, and the brethren deceptive. (2) Practice is a field of which tact is the manure. (3) Patients are comparable to flannel—neither can be quitted without danger. (4) The physician who absents himself runs the same risk as the lover who leaves his mistress—he is pretty sure to find himself supplanted. (5) Would you rid yourself of a tiresome patient, present your bill. (6) The patient who pays for his attention is but exacting; he who does not is a despot. (7) The physician who depends on the gratitude of his patient for his fee is like the traveler who waited on the bank of a river until it finished flowing, so that he might cross to the other side. (8) Modesty, simplicity, truthfulness!—cleansing virtues, everywhere but at the bedside; there simplicity is construed as *hesitation*, modesty as *want of confidence*, truth as *impoliteness*. (9) To keep within the limits of dignified assurance without falling into the ridiculous vauntings of the boaster constitutes the supreme talent of the physician. (10) Remember always to appear to be doing something—above all, when you are doing nothing. (11) With equal, and even inferior talent, the cleanly and genteelly dressed physician has a great advantage over the untidy one.

Some Urgent Needs.—Dr. J. H. De Wolf, read a paper in Baltimore recently, his subject being "The Urgent Needs of the Medical Profession." He spoke of the overcrowding of the profession, contended that no man with an unsavory character or deficient education should be permitted to enter the medical ranks, favored revoking the charters of twenty-two colleges, recommended the establishment of a medical tribunal for expelling physicians guilty of offences, and urged the adoption of laws making a medical debt due until paid and allowing attachment of wages, income or salary to collect the same. He believed in making the fee table statutory, and thought America should be reserved for American doctors, this to be accomplished by requiring foreign doctors to reside here two years before they could practice.

He was in favor of requesting the State Legislature to pass laws that no more medical colleges be organized unless they can present superior advantages to the best in existence, and that the term respectable medical college be defined by the faculty as one furnishing its students with at least one year's hospital experience, and three years, of nine months each year, of preparatory work. He suggested that a committee be formed by medical men, unconnected with medical colleges and dispensaries, to protect the interests of the practitioner; this committee to demand at least a grammar school education, and a good character from those desirous of studying medicine. The paper was referred to the Publication Committee.

Treatment of Indolent Ulcer by Multiple Incision.—Dr. A. Harbordt's method of treating indolent ulcers is described as follows by Dr. F. Speth, in the *Practitioner*, May, 1888: The entire ulcer is divided lengthwise by a deep incision extending far into the healthy tissue. Cross incisions are then made through the callous tissue into the healthy at intervals of about three-quarters of an inch. The incisions must go through not only the skin but the underlying fascia; the wounds must gape widely. The bleeding, often profuse, must be stopped with tampons; and the whole wound, which it must be owned has rather a slaughter-house look, is done up with iodoform dress-

ings. When after eight to fourteen days the dressing is changed the difference in appearance is very marked. Healthy granulations are springing up in abundance from the gaping incisions, and soon cover the whole surface, reaching the level of the surrounding skin from which the growth of new epidermis is seen to advance rapidly. At this stage, of course, when the loss of skin has been great, transplantation may be effected and will now be useful. The multiple incisions must of course be postponed till the ulcer is no longer foul, all necrosed fragments being first removed; this is in order to avoid the risk of septic infection of the deeper parts. The advantage of the method is obviously that highly vascular healthy parts are enlisted in the healing process of granulation, and thus not only the wound but also the resulting cicatrix are under more favorable conditions. It is obvious that the method has its limits of application: I may mention, for example, the diathetic difficulties introduced by the presence of syphilis, tuberculosis, scurvy, arterial atheroma, and so on. These require general treatment of an appropriate kind. But in the indolent ulcerations resulting from burns, severe contusions, varicose veins, and so on, the treatment has been of such signal service that we are encouraged to extend its application to other forms also.

On the Treatment of Sebaceous Tumors.—Many people, the subjects of congenital sebaceous tumors and "wens," object to having them removed, on the score that the remedy is worse than the disease, and the after-consequences may be serious.

The following is the method which a writer in the *British Medical Journal* has adopted in such cases, and with marked success. With a cataract knife (Græfe's) puncture the cyst, and gently squeeze out the contents; then introduce a very small piece of nitrate of silver. On the following day, by means of a pair of forceps, the capsule of the cyst can be withdrawn, just like the shell of a bean, without any portion being left adherent. In no case has there ever been any return of the growth or any ill effects.

The method, if tried, will be found to have many advantages apart from its simplicity and thoroughness.

The Microbe of Tetanus.—The bacillary origin of tetanus is rapidly being placed on a sound basis. In some recent experiments with a certain bacillus, which is credited with this pathogenic power, forty-five guinea-pigs, seventeen rabbits, two lambs and two sheep were inoculated with a cultivation, with the result that twenty-seven of the animals died of well-marked tetanus, twelve suffered from tetanic symptoms, from which they recovered, and ten died from acute systematic infection without tetanic manifestations. Although the investigation bore on the pathology of idiopathic tetanus, it is highly probable that traumatic tetanus is due to the same cause.

Cancer Among Vegetarians.—According to the *British Med. Journal*, Dr. Hendly, the resident surgeon, states that the records of the Mayo hospital at Jeypore, India, show that of 102 major operations for cancer performed forty-one were on the persons of flesh eaters, while sixty-one were on those of strict vegetarians who had never eaten meat since their birth. This would seem to contravert the popular idea of immunity from cancer on the part of vegetarians, which had received such strong confirmation from the statements and deductions of MM. Reclus and Verneuil.

Peppermint Water in Pruritus Pudendi.—In an article published in the *British Medical Journal* for April 14th, 1888, Dr. Amand Routh advocates the employment of peppermint water as a lotion in pruritus pudendi. He suggests that for the sake of convenience the aqua menthae piperitæ

of the British Pharmacopœia, which is somewhat bulky, be concentrated, an object best attained by borax, in itself soothing and antiseptic. Patients can make their own lotion by putting a teaspoonful of borax into a pint bottle of hot water, adding five drops of oil of peppermint, and shaking well. The parts affected are to be bathed with a soft sponge. If the skin is unbroken, this lotion will remove the itching; otherwise, a preparation made of olive oil and five grains of iodoform to the ounce should be used in its place. Peppermint water gives the most permanent relief in the neurosial form, especially in the reflex pruritus of pregnancy. Peppermint excels all other drugs, cocaine not excepted, in cases due to pediculi, ascarides, an irritable urethral caruncle, an intra-cervix polypus, cancer of the cervix, distention of Bartholin's ducts or glands, the leucorrhœa of elytritis, endo-trachelitis, and metritis, the irritating discharges of advanced carcinoma uteri, or a gouty or diabetic diathesis.—*N. Y. Med. Jour.*

Aphorisms from the Study.—Some one should preach a sermon on the bad taste of pursuing good taste too exclusively.

The philosopher's trouble is that while he can give fifty years to evaluating life, impartially, life has spent several thousand years in shaping his prejudices.

In moments of decision there is danger of mistaking the exhaustion of long spiritual struggle for resignation to fate.

We talk of immortality, but we even do not know yet what time is. Perhaps time has possibilities that dwarf immortality, and we are fooling ourselves with the poorer choice. Let us have the very best.

If Heaven should grant one more gift to this country, the mistake would not be great were it a more sacred observance of parentage.

Faith, like any virtue, must have its test, and probably the reason for inexplicable evil.

An optimist is an unreflective individual with nerves at concert pitch.—*Xenos Clark, in Century Bric-à-Brac.*

Poisoning by Iodol.—Pallin applied 75 grains of iodol after removing a sequestrum from the clavicle. During the evening of the same day the patient became delirious, and on the following day his temperature was 102.2°, his pulse was 136, small, irregular; he vomited and was apathetic. The urine showed traces of albumen and a weak iodine reaction. Although the dressing was changed immediately, the symptoms lasted four days longer.

Microbes in Expired Air.—Lister was perhaps the first observer who called attention to the singular fact that air which was admitted into the pleural cavity as a consequence of simple fracture of the ribs produced very different and much less serious results than in pneumothorax following incised wounds of the chest. The explanation is to be found in the purity of expired air in respect to the bacterial and other growths. Professor Tyndall has already remarked that expired air was *optically* pure, i. e., when traversed by a luminous ray it showed no suspended particles. MM. Strauss and Dubrenth have proved this even more conclusively by breathing through sterilized *bouillon*. Only in very rare cases did growths or moulds develop, and these were probably due to some defect in the procedure. The idea that we are breathing out at each expiration loads of bacilli, for the benefit of our fellow-creatures, must therefore be classed among the "exploded ideas."

Removal of Warts by the Internal Use of Arsenic.—Mr. B. G. Pullin, of Sidmuth (*Brit. Med.-Chir. Jour.*), gives the history of a number of cases in which he has cured warts on the hands by the use of small doses of arsenic, from one to three minims of Fowler's solution twice a day. He states that in every instance the cure has been rapid and complete.

Cocaine in Dislocations.—The setting or reduction of dislocations may be made painless, according to Dr. Grigorieff in *Meditsinskaia Obozreniye*, by the hypodermic injection of cocaine into three or four points in the neighborhood of the joint. The Russian surgeon uses the ordinary syringe and a five per cent. solution of cocaine, injecting fifteen minims each point. The anesthization of the part takes place in from three to five minutes, and the effect of the remedy is not only to deaden all sense of pain, but to relax the muscles, etc., around the joint to that extent that reduction is rendered very easy as well as painless.

A Summer Drink for School Children.—Dr. Duchesne, of Paris, has proposed the following compound, being a slight modification of a formula of his used last summer with success in French schools. The object of the quassine is to impart a slight bitterness, to better quench the thirst and prevent children from drinking more than is good for them.

Glycyrrhizin	gr. xvi.
Powdered sugar	gr. xvi.
Bicarbonate of sodium.....	gr. xii.
Crystallized quassine.....	gr. 1-200
Oil of anise.....	gtt. 2-3 m.

For one powder

This quantity is to be dissolved in one quart of water when wanted for use. The beverage costs in France about half a cent a quart.

Night-Air as a Producer of Phthisis.—Dr. Shepherd contends in *The Lancet* that phthisis is the result of constantly recurring irritation of the air passages, and that the cold air breathed at night is at least one efficient cause of this irritation. He observes that it is well known that those who live most in the open air are the least likely to suffer from phthisis. Why? Simply because their lungs are so accustomed to cold air that they are not irritated by it at night. Phthisis is a disease of the night. It is so simply because we inhabit hot rooms by day and cold rooms by night, and many lungs find it more than they can do to accommodate themselves to the constantly recurring changes in the temperature. The author fully believes "that if some means were devised whereby a continuous supply of pure warm air could be given at night to those threatened—ay, and to those actually suffering—with phthisis, we should in the course of a very few years find, that phthisis was rare in England as in Egypt or Iceland."

Camphor for Styes and Furuncles.—According to a correspondent of the *Mississippi Medical Monthly*, Dr. Cauldwell, of this city, in one of his recent clinics, gave the class his treatment of styes and furuncles with camphor, which is original with himself and is quite successful, certainly very simple and cheap. On styes he uses ordinary camphorated oil applied as often as convenient and before the formation of pus. He has a record of seventy-five cases, all successful. For furuncles he uses the ordinary tincture, rubbed on well six or eight times a day. He has a record of fifty-one cases thus treated with only two failures, and in these two the treatment was begun too late. He said also that he had been remarkably successful in treating felons with a saturated solution of bicarbonate of soda. He directs the patient to keep the felon surrounded with cotton batting, kept constantly wet with the solution.

Milk Curd.—Dr. James Ritchie, before the Obstetrical Society of Edinburgh: All the specimens of milk were heated to 98°, a small quantity of salt was added, then essence of rennet, the mixtures were stirred, then left in the water-bath at about 98° for half an hour. These specimens confirm the results obtained in practice, viz., the

measures of advantage gained by dilution of the milk, the great benefit of boiling it, the marked improvement in the quality of the curd if it be kept open by mechanical means, as by the addition of gruel or of lime-water. But they show that this benefit is lost in the case of lime-water mixtures if much acid is present, and that under such conditions a softer curd is obtained by mixture with gruels than by boiling only, or by the addition of lime-water only.

The Uric Acid Headache.—Haig, in *St. Bartholomew's Hospital Reports*, Vol. XXIII, p. 201, defines this as a headache which recurs at intervals of three days to a week, or from that to one or several months, throughout a large number of years in the life of an individual. It lasts from twelve to twenty-four hours and then goes completely away until the end of the interval. The attacks are rendered less frequent and less severe by a diet poor in nitrogen. There is often a family history of headache or of gout, or of both. The author has frequently found this headache associated with a large excretion of uric acid, and has noticed that the administration of an acid will stop the excessive excretion of uric acid and remove the headache in one or one and a half hours. He reports several cases in full, together with a tabular arrangement of the principal features of interest. The headache is probably caused by the action of some poison in the blood (uric acid) on a nervous (vaso-motor) system especially sensitive in some parts of the cranial circulation. Strychnine is sometimes very useful in this headache, on account of its tonic action on the vaso-motor centre. Symptoms of gastrointestinal derangement are notable by their absence. The tongue is clean, the bowels regular, food is well taken, the pulse is slow, and the temperature normal. This is in marked contrast to the frontal headache, furred tongue, fever, rapid pulse, and disgust for food, of real gastrointestinal derangement. The sulpho-cyanide is usually in excess in these headaches occurring in gouty or rheumatic families, as Fenwick has remarked. The author then lays stress upon the alliance between these headaches and epilepsy, as illustrated by one of his cases, in which the two affections appeared to improve together under a proper diet.

Acetic Acid as an Antiseptic.—Dr. Engelmann (*Jour. de Med.*), employs in his obstetric practice a three to five per cent. solution of acetic acid. As an antiseptic this, he says, is quite effectual as carbolic acid, to which it is superior in being non-poisonous, in its astringent and hemostatic properties, and in being readily absorbed by dressings. A five per cent. solution acts on mucous membranes as an effectual caustic.

Brain Surgery in the Stone Age.—An interesting address was recently delivered by Mr. Victor Horsely, F. R. S., at the Royal Institution, on the subject of brain surgery in the stone age. Having referred to the fact that our present civilization is the outcome of man's working in stone, bronze and iron in successive epochs, he said it was certain that as Troy was being overwhelmed by a race who had but quite lately learned the real power embodied in the use of iron, and who were still clad in splendid bronze armor, the great nations of the northwest, whose surgical skill was his theme, were perforce content to satisfy their domestic needs with sharpened stone, while the luckiest among them but rarely owned a single metal instrument, even a bronze one. It was to him a most fundamentally important question whether the art of trephining had not reached a relatively high development in Asia before its introduction into Europe, or whether it could have been really evolved as to a definitely new procedure in France, where we get the clearest evidence of its use. He leaned to the view that some light broke upon us from the history

of its decline rather than from that of its rise. It was during the polished stone period that this branch of surgery especially flourished in France, while in the same age it was carried on in the neighboring European countries, though in a far less degree. Hence, whereas the Broca Museum of Anthropology in Paris contained about sixty specimens bearing upon this point, including about ten fairly complete crania, on the other hand, the skulls operated on in all Europe besides could be counted on the fingers. Professor Horsely having spoken of the domestic life and habits of the dwellers in caves, showed, by reference to a manuscript of the 13th century, that the mode of perforating the skull adopted by the stone age peoples was either by scraping, drilling or sawing the bone, the balance of evidence being in favor of the last process. He next showed that not only the pieces of bone which were removed, but also the edges of the holes thus made, were thought to possess beneficial, probably supernatural properties, and the fragments were worn as amulets. He further showed from the pathological evidence afforded by the specimens that the majority of the patients must have survived the operation. After fully describing the *technique* of the operation, the question as to the reason of its being undertaken was considered. He found that most of the operations appeared to have been performed on the vertex of the head, and that, therefore, they were probably undertaken to relieve depressed fracture. The lecturer then drew attention to the significant fact that the holes were also grouped, almost without exception, over the motor and epileptogenic region of the surface of the brain. He further suggested that since a depressed fracture in this region would almost certainly give rise to epilepsy, and at the same time occasion such local pain as to call for its removal for that reason alone, it was obvious that traumatic epilepsy would be relieved, if not wholly cured, by a trephining operation originally designed for nothing else but the relief of the fracture, a result which would certainly lead to wider adoption of the operation. The lecture was copiously illustrated by lime-light photographs of the trephined skulls and of the stone age implements.

A New Physical Sign of Tricuspid Regurgitation.

This sign, discovered by Dr. W. Pasteur, of the Middlesex Hospital (London *Lancet*), consists in a distension—with or without pulsation—of the superficial veins of the neck, occurring when firm pressure is exerted over the liver in the direction of the spinal column, and independent of the movements of respiration. "Although the number of cases in which I have observed this phenomenon (says Dr. Pasteur) is certainly limited, I have never failed to elicit it when there was indubitable evidence of tricuspid incompetence; on the other hand, I have hitherto invariably failed to obtain it in other forms of cardiac valvular disease, and in various cases of hepatic enlargement from causes other than passive congestion. I can not but think that this sign may furnish an important aid to diagnosis in cases where the usual signs of tricuspid regurgitation are ill-developed or in abeyance, and that it may prove a valuable factor in the difficult general problem and prognosis in cases of cardiac disease."

Cow's Milk (*Gaillard's Medical Journal*).—It is a well-known fact that the quality of the cow's milk changes with the time lapsing after she has calved. On first calving it is decidedly laxative. Later on it loses this property, and at the end of a year the milk of a farrow cow is very astringent. The milk of a cow with calf also gradually changes with the period of gestation, becoming increasingly watery and having a limy taste. It is evident, therefore, that a child fed on "one cow's milk" must, during the course of eighteen months, receive quite a variety of food, and that at times during this period this food is not

strictly of a physiological nature. In the supply of our cities, moreover, no care, of course, being taken to keep these different varieties separate, the milk must be of a very heterogeneous nature. To obviate the dangers which are associated with this variation in the quality of milk, Mr. Lloyd F. Abbot advises (*Boston Med. and Surg. Journal*) the spraying of milch cows. The results which he claims follows this operation, are: 1. Increase in the quantity of milk. 2. Constancy of quality. 3. Improved quality of milk. 4. Decrease in cost of keeping the cow. 5. Prolongation of the milk-giving period. 6. Increased readiness of fattening the animal and improved quality of flesh. He sprayed a cow in November, 1880, at which time she was giving ten and a half quarts of milk daily. At the date of writing, February 27, 1884, the cow was still milking and giving nine and a half quarts a day, and of better quality than that given by a cow having her ovaries. Dr. Mecuen, who took part in the discussion of Mr. Abbott's paper, stated that one cow from which the ovaries were removed has produced milk continuously for eleven years, and in this entire period has fallen off only three pints.

Artificial Cow's Milk.—Dr. Le Dentu presented the following formula to the Medical Society of Trieste (Austria), as an exact imitation of cow's milk. It has been found extremely useful in the treatment of infantile colics and true cholera infantum:

Take of

Dried egg albumen.....	150 parts.
Oil of sweet almonds.....	350 parts.
Milk sugar.....	400 parts.
Carbonate of sodium.....	4 parts.
Chloride of sodium.....	2 parts.
Neutral phosphate of lime.....	5 parts.
Water.....	10,000 parts.

Make an emulsion.

The Normal Man.—Professor Huxley asserts that the proper weight of man is 154 pounds, made up as follows: Muscles and their appurtenances, 68 pounds; skeleton, 24 pounds; skin $10\frac{1}{2}$ pounds; fat, 28 pounds; Brain, 3 pounds; thoracic viscera, $3\frac{1}{2}$ pounds; abdominal viscera, 11 pounds; blood which would drain from the body, 7 pounds. The heart of such a man should beat 75 times a minute, and he should breathe 15 times a minute. In 24 hours, he should vitiate 1750 cubic feet of pure air to the extent of 1 per cent. A man, therefore, of the weight mentioned, should have 800 cubic feet of well ventilated space. He would throw off, by the skin, 18 ounces of water, 300 grains of solid matter, and 300 grains of carbonic acid, every 24 hours; and his total loss, during that period, would be 6 pounds of water and a little more than 2 pounds of other matter.

The Absolute Signs of Death.—Dr. B. W. Richardson, in a paper read before the Medical Society of London (*Lancet*, Dec. 15, 1888), gives the following efficient practical details: 1. Apply the fillet to the wrist and examine the veins at the back of the hand. If life is not extinct, turgescence of these veins will soon be apparent. 2. Open a vein at the bend of the elbow and seek for stringy coagula; if necessary, two or more veins. 3. Inject ammonia hypodermically—after which the absence of a red blotch under the skin will be strong evidence of death. 4. Examine by strong light for absence of red color from the transparent tissues. 5. If any doubt still remains, and rigor mortis has not developed, let the body be kept in a damp room at 84° F.; this will speedily bring about decomposition if the body is dead, and will favor recomposition or restoration if life is not extinct. This last test has the advantage that it can be carried out in cases where it is forbidden to touch the body.

MISCELLANY.

—We understand that there is an attempt being made to form a trust in medical journalism in this country. It will probably result in combining some of the weaker ones, which will be no loss to readers, and the remaining papers will be the gainers. We have no idea that the old established journals will have any thing to do with the effort.

—It is reported that several leading high-dilution homoeopathic physicians have adopted the practice of "mind-healing, Christian science" and the like. It must be admitted that they only had a short step to take.

—Dr. H. I. Ostrom has arranged to spend three months with Lawson Tait in his private and hospital work, which doubtless will prove a great opportunity.

—Dr. Strong, chief of Staff, W. I. Hospital, reports 800 patients treated during the month of April, mortality 3.25 per cent.; 1641 patients have been treated since January 1st. Drs. Clausen and Trinkle received the usual diploma from the commissioners. Drs. Widmayer, Hallett, Rambo and Mills have been appointed to fill vacancies.

—The late Wm. J. Syms, of this city, has left the munificent sum of \$350,000 for building and maintaining an operating theatre in connection with Roosevelt Hospital. The College of Physicians and Surgeons will be greatly benefited in its clinical teaching by this enterprise.

—A Pittsburg physician, named Cooper, has recently applied for a patent on a process to preserve human bodies by compression. By curious combination of steel presses and hot rollers, he excludes all the moisture and reduces a full-grown body to a very small size, twelve by fifteen inches, rendering it as hard and imperishable as marble. It is thought that the process will supersede cremation, as bodies thus preserved are not only not offensive, but can be made to assume various ornamental shapes and be kept in the parlor or elsewhere as constant reminders of the departed. The doctor has on his centre-table the remains of a child pressed into the form of a cross. It resembles the purest marble, is highly ornamental and is perfectly odorless.

—In *The New England Med. Monthly*, Hutchinson speaks of the absence of catarrh in the West Indies. An American, sitting in the club-room one day, had occasion to clear his throat, whereupon every body turned round and stared at him in such a way that he was compelled to apologize by saying that catarrh is so common in the states that nobody notices such an occurrence there.

—The science of hypnotism is developing fast. M. Joseph Bertrand, the secretary of the French Academy of Science, submitted to that body at its last sitting a mode of super-inducing anesthesia by purely mechanical means. It consists in directing the rays of a mirror, of the sort employed by lark catchers, on the eyes of the subject. A species of hypnotic trance, accompanied by absolute physical insensibility, is thus produced.

—A Methodist Episcopal doctor of divinity, recently, in his address to the graduating class of an eclectic medical school, urged them to beware how they admitted ministers of the gospel into sick-rooms, as ministers, the devil and the undertakers all wear long, black coats, and generally have a depressing effect on the sick. The minister's work, he thought, was with the living, and not with the dying, except in rare instances.

—A truss for straightening crooked noses is among the novelties in orthopedics. A mask of leather was at first devised for this purpose, but Dr. W. J. Walsam has lately (*Lancet*) invented a felt skull-cap to which an apparatus is attached that produces any degree of lateral pressure on the deformed organ.

—The largest professional fee for limited service is said to have been paid to Surgeon-Major Freyer, of the Indian medical service, for treating the Nawab of Rampoor for three months' suffering from rheumatic fever. The Nawab gave him a lac of rupees, 50,000 dollars.

—Dr. Hobart A. Hare, in the *University Med. Magazine*, advises that where there is embarrassed respiration or temporary suspension of the inspiratory effort during the administration of ether, that in place of resorting to flagellation with towels wet with cold water, a little ether be poured upon the belly; and he notes the fact that in many cases under his observation the cold produced by the rapid evaporation of the ether caused so great a shock as to cause a deep inspiration.

—Sir William Gull says that when fagged out by professional work he recruits his strength by eating raisins, and not by drinking wine or brandy.

—The *California Medical Journal* says of California wine that it is "an intoxicant, but rather a poor one. As a sanitary agent it stands at the bottom of the list. If it were not in fashion with so many physicians, there would be nothing to recommend it."

—Those ladies (says the *Maryland Med. Journal*) who desire to stand next on the list of futures, of a certain fashionable obstetric nurse, will require to be endowed with an unusual amount of prescience, as she informs her patrons that her dates are full up to a year in advance. Truly the Americans are a progressive and particularly wide-awake people.

—A pint of warm water, taken on an empty stomach, in the morning, is the safest and surest of all remedies for habitual constipation. It dissolves the fecal matter and stimulates peristaltic action, thereby giving a normal action without pain. If the tongue is coated, squeeze a lemon into the water and drink without sweetening.

—The *Sanitary Inspector* says there is considerable talk just now against writing paper ruled with blue lines, as the opinion of some investigators is that it is injurious to the eye; and the school commissioners of Mayence have ordered that all school writing paper shall be ruled in black.

—A practitioner of great experience in the east assures the editor of the *Hom. World* that globules are by far the best form in which to have medicines in hot countries. They retain their power unimpaired, when tinctures, however, well corked, will evaporate.

—Goodell says the head of the child and not the perineum needs support in labor.

—Lavage, or washing out of the stomach by means of the syphon or stomach-pump, is said to be resorted to by Washington young men before going to dinner parties. The washing not only increases the capacity of the stomach, but has a very appetizing effect, besides brightening up the intellectual faculties and creating a feeling of general well-being. The young man is, therefore, thus placed in a condition to play both the hog and the gentleman to his best capacity.

—It is said that wherever the eucalyptus tree has been planted and grown in large quantities, entire exemption from mosquitoes has been secured, although within a mile or two of the trees these insects were swarming in clouds, and almost devouring unprotected victims.

—The application of beef marrow to the skin around the throat, is said to relieve sore throat and hoarseness in one hour.

—Dr. Worms of the Paris Academy of Medicine has ascertained that bees, ants and wasps show a marked dislike to the new saccharine. To the human palate there is no difference in the taste between it and sugar. It has been shown, however, that its use disturbs digestion.